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INDIANS ON FEDERAL RESERVATIONS
IN THE UNITED STATES
- A DIGEST -

PHOENIX AREA

- * Arizona
- * California
- * Nevada
- * Utah

January 1961

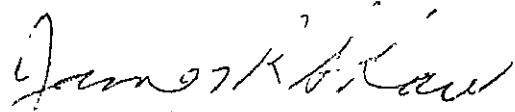
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FOREWORD

The Division of Indian Health has had a constantly recurring need for general summary information on the various Indian reservation groups which come under its jurisdiction. Moreover, other governmental as well as non-governmental agencies have had an increasing need for similar information. Unfortunately, no one source has been able to provide, briefly and simply, the variety of facts required.

A series of "Digests" is, therefore, being prepared to present basic information about each Indian reservation group in the various Division of Indian Health Area jurisdictions. The summaries are not intended as comprehensive studies -- rather as fact sheets for quick and ready reference. Since they are aimed primarily to highlight the particular interests of health personnel, they may omit items of more direct concern to persons in other fields of interest. For example, no attempt is made to describe reservation conservation or development projects, business enterprises, educational endeavors, or Federal, State, and local public assistance and welfare programs.

The "Digests" are prepared by staff of the Division of Indian Health in the Bureau of Medical Services. Mr. John Costley and Mrs. Laura Rosen had shared responsibility for searching the wide variety of information sources, selecting the pertinent facts to be used, and developing the general format and presentation before they transferred from the Division's Program Analysis and Special Studies Branch. Mr. Warren Cardwell was responsible for the final presentation. Special mention is made of the invaluable assistance given by the Phoenix Area Office staff members and by staff of various Indian health facilities in that jurisdiction, who not only reviewed and checked the material but also provided considerable additional information. Special acknowledgement is also made of the assistance and helpful suggestions of the members of the other Branches of the Division of Indian Health.

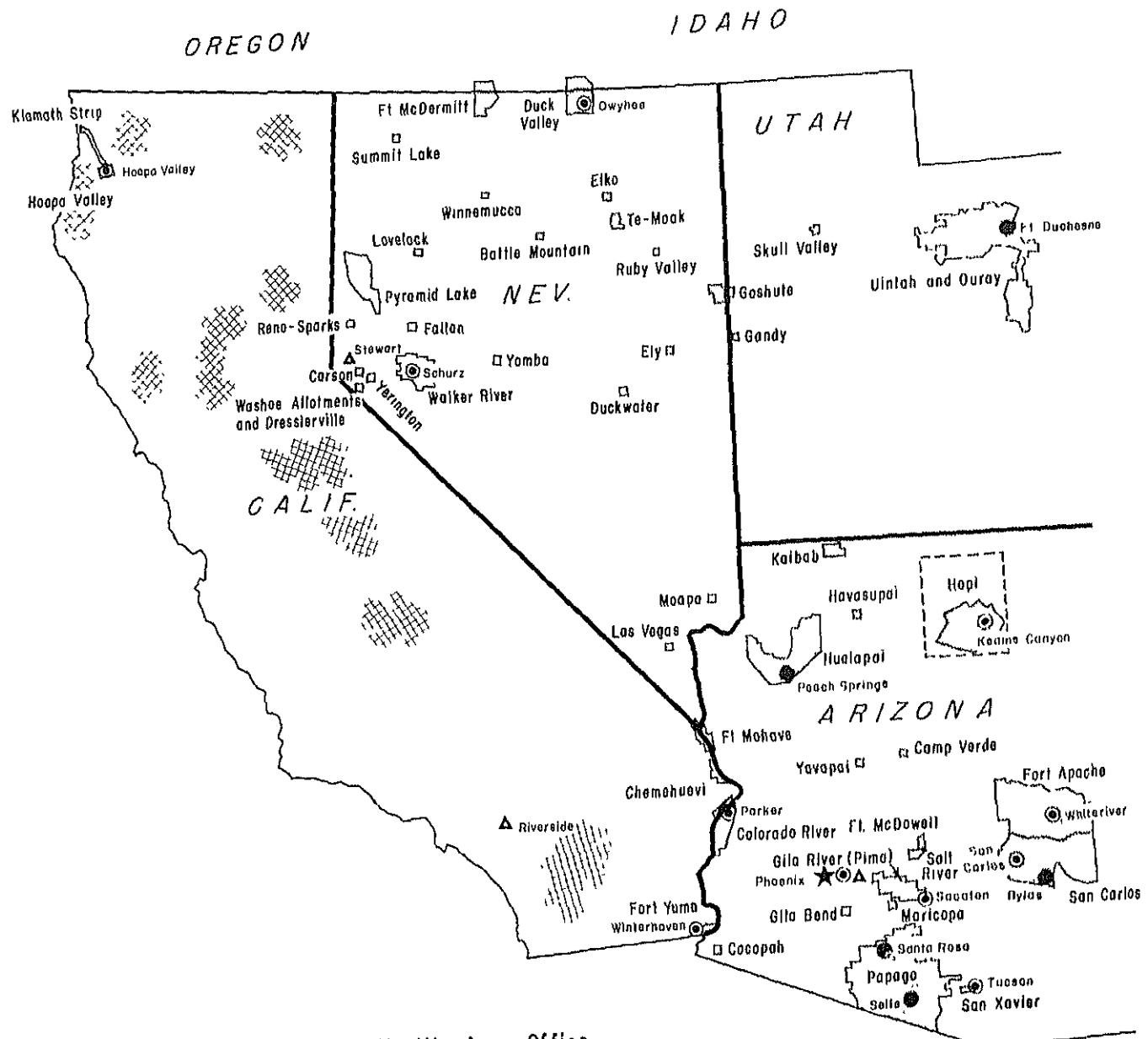


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Chief, Division of Indian Health

FEDERAL INDIAN RESERVATIONS AND HEALTH FACILITIES

PHOENIX AREA

(Arizona, California, Nevada, Utah)



- ★ PHS Indian Health Area Office
- ◎ PHS Indian Hospital
- PHS Indian Health Center
- △ Indian School Health Center
- Federal Indian Reservation
- ▨ Scattered rancherias and small reservation areas

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INTRODUCTION AND SUMMARY

The total Indian population in the United States (excluding Alaska) was estimated to be 510,000 in 1959. Alaska Natives - Indians, Aleuts, and Eskimos - number about 37,500. Approximately 370,000 of our Indian and Alaska Native citizens are considered potential beneficiaries, in varying degrees, of the Indian Health Program, which is administered by the Public Health Service in the Department of Health, Education, and Welfare. These beneficiaries reside on some 200 Federal Indian Reservations and adjacent land units and in several hundred Alaska Native villages.

Responsibility for the provision of health services for Indians and Alaska Natives was transferred to the Public Health Service from the Bureau of Indian Affairs, Department of the Interior, on July 1, 1955. The Service administers this program through the Division of Indian Health, in its Bureau of Medical Services.

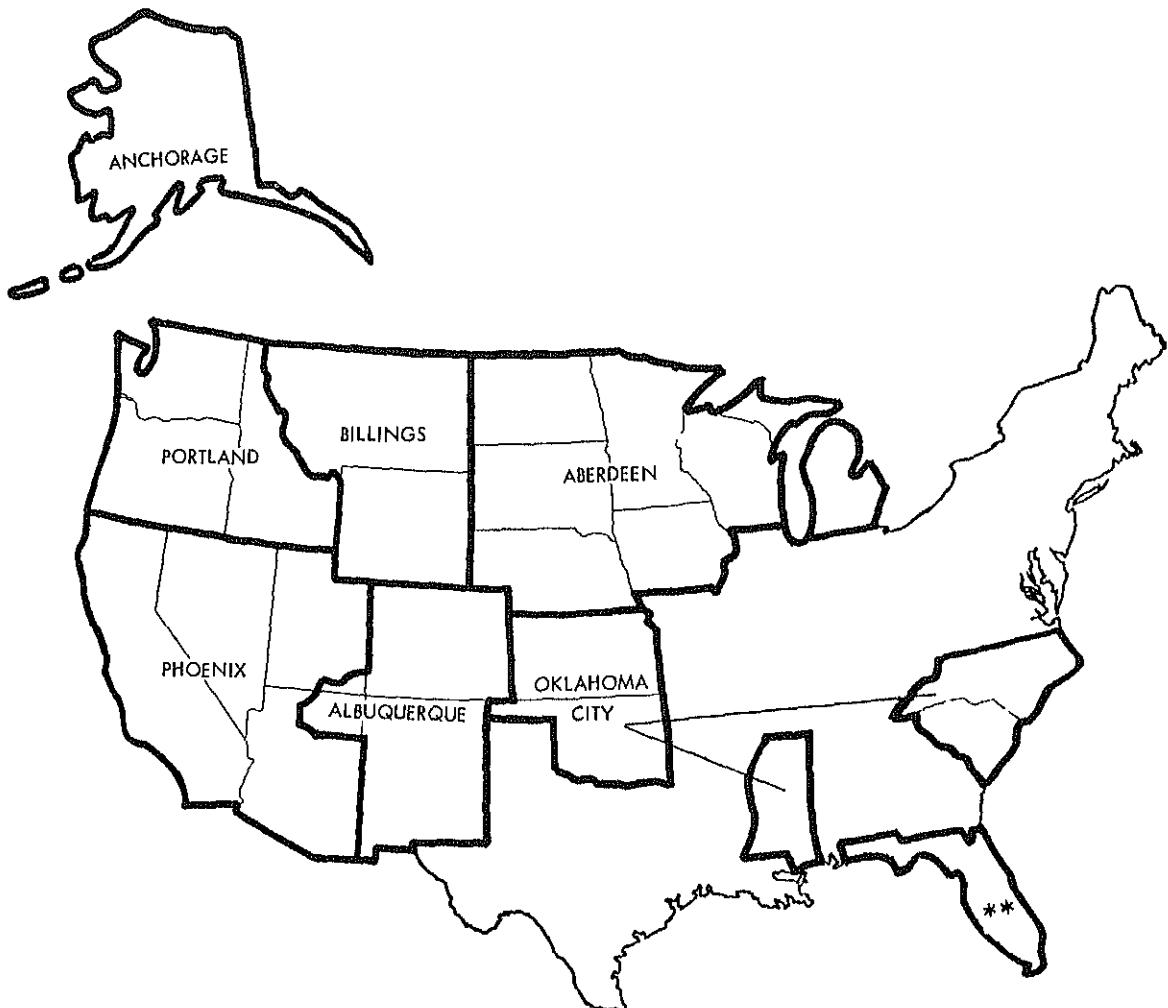
At the present time the Division operates 51 hospitals for Indians and Alaska Natives, and through the outpatient clinics at these facilities, treatment for ambulatory patients and preventive health services are available. The Division of Indian Health also provides outpatient services at 24 field health centers, 18 school health centers associated with Bureau of Indian Affairs Boarding Schools, and at numerous health stations and health service points - many of them satellite to Public Health Service Indian hospitals and health centers.

Extensive use is also made of community resources for hospital and medical care and preventive health services. Contractual arrangements are in effect with some 200 community hospitals and with several hundred private physicians and dentists. Public health services are also made available through contracts with 16 State and local health departments. In addition, several local and State welfare departments, under contract with the Division, arrange for medical and hospital care for Indian beneficiaries.

Direct services related to education and welfare, and indirect services involving land management, roads and resources within reservation areas, and economic development, continue to be administered by the Bureau of Indian Affairs in the Department of the Interior with which the Division of Indian Health maintains close working relationships. In both organizations, the program operations are conducted through a system of Area and Field Offices (see map page viii). Basically, the Indian Health Area and Field Office structure is similar to the field organization of the Bureau of Indian Affairs.

The jurisdiction of each of the Public Health Service Indian Health Areas includes large numbers of Indian people with heterogeneous cultural patterns and varying economic circumstances. Altogether, there are today in the United States several hundred Indian tribes and bands, each with distinguishing characteristics. Sometimes members of a tribe are few in number, clustered together at one location; but more often they are scattered over an extensive area. Once a vigorous people, totalling about 800,000, the Indian population has been sharply reduced by tuberculosis, smallpox, dysentery and other diseases brought by the early white settlers. Today, the Indian people are still faced with

PUBLIC HEALTH SERVICE
BUREAU OF MEDICAL SERVICES
INDIAN AND ALASKA NATIVE HEALTH AREA OFFICES*



*Within the Area Office jurisdictions are 4 Indian and Alaska Native Health Field Offices:

Aberdeen Area

Bemidji, Minnesota Field Office

Albuquerque Area

Albuquerque, New Mexico Field Office

Window Rock, Arizona Field Office

Anchorage Area

Mt. Edgecumbe, Alaska Field Office

**Services to the Seminole Indians, Florida, formerly administered through PHS Indian Health Area Office, Oklahoma City, now administered through the PHS Regional Office IV, Atlanta, Georgia.

a burden of illness far in excess of that found in the general population. Most of their illnesses are from preventable diseases which have long been under control in the majority of the Nation's population.

In developing its program for improving the health of the Indian people, and in planning for the most effective use of available resources (Federal, State, and local), the Public Health Service has a need for basic facts concerning the reservation groups which, for health purposes, are under its jurisdiction. This series of "Digests" of information from a wide variety of sources has been prepared in an effort to meet this need. Separate "Digests" cover the reservation areas in each of the Public Health Service Indian Health jurisdictions.

The present publication is comprised of material on Federal Indian reservations and Indian land units in four States in the Phoenix Area -- Arizona, California, Nevada, and Utah. The various Indian reservations and colonies (Nevada) are grouped according to Health Service Units, as delineated at the time this material was compiled, for health program planning purposes in the Phoenix Area.

The People

Health services are available in varying degrees to some 53,000 potential Indian beneficiaries in Arizona, California, Nevada, and Utah through the Public Health Service Indian Health Area Office in Phoenix. Of the Indian beneficiaries who live in Arizona (81,000), 45% or 36,000 receive health services through the Phoenix Area Office, while the other 55% - Navajos in northern Arizona - are in the jurisdiction of the Division of Indian Health Field Office, Window Rock, Arizona. In Nevada an estimated 5,700 Indians are potential beneficiaries, and in Utah about 2,100. In the State of California, nearly 9,000 Indians, scattered in small numbers in rancherias and on a few reservations, have varying relationships with the Federal Government. For a number of these California groups the relationship with the Federal Government is in the process of conversion. Some are receiving services through local programs and local resources, while others remain beneficiaries of Federal Indian programs. The variation in the status of Federal trusteeship relations and the litigation which is pending affecting a number of these groups have influenced the delineation of the health service areas and the scope of health services being provided.

The Indian people within the jurisdiction of the Phoenix Area have much in common; yet, due to the vast expanse of the Area, prolonged isolation, noteworthy differences in environments and resources, and unique historical backgrounds, all tribal groups have individual present-day cultural characteristics which distinguish each from the other and from the predominant non-Indian society. The ways of life of all tribes are changing more rapidly in some ways than others, so that all groups are adjusting to some degree to the surrounding community and to the mode of living of the society at large, but they are doing so at varying rates depending upon local conditions. Among several large groups (particularly in Arizona), the people have retained many of the ways of their past in spite of, for example, improved communications with outside groups and established patterns of mobility among Indian people. Among the groups which have held to many of their ancient ways are the Hopis, Apaches, some of the Yuman-speaking peoples, the Pimas and their cousins the Papagos, the Paiutes, and several others. These groups represent to some extent the variety in cultural heritage observable in the Phoenix Area.

The Hopis

The Hopi country in northeastern Arizona is semi-arid and characterized by valleys and mesas (flat-topped, rocky hills formed by erosion). Through the 14th Century, many Hopi settlements were located in the Jeddito Valley, but a mass movement away from these sites and toward the three high mesas in the center of Hopiland took place before the middle of the 16th Century. Migration is attributed to a period of drought.

To evade the Spanish in the 17th Century, the Shoshonean-language-speaking Hopis living below the mesas moved to the top of the mesas and built new towns of apartment-building-like houses where they might safeguard their way of life from a more protected position. During this period they were joined by Pueblo Indians from the Rio Grande. In recent years, many Hopis have resettled at the foot of the mesas and in the valleys beyond. The old town of Oraibi, known to have had a population of at least 800 at one time, now has fewer than 150 inhabitants.

Hopi religious beliefs and practices include recognition of many deities, secret societies, elaborate ceremonial events, close attention to the sun, and communion with nature. They visualize "an harmonious universe in which nature, the gods, plants and animals and men are independent and work together systematically and reciprocally for the mutual welfare of all." These beliefs are woven into the pattern of Hopi life. For example, religion, through the secret societies, is the traditional basis of government in this group. The dominant role played by males in the religious sphere is balanced by the important role which women play in the social system of the group. Clans are the basis of Hopi kinship, and descent is traced through the female line.

The Hopi woman is best known for her handicrafts, including the yellow and black pottery of the First Mesa, the coiled baskets made from yucca plants at the Second Mesa, and the baskets and placques of desert sage of the Third Mesa. Other items which are characteristic of Hopi skills are robes, blankets, bright colored belts and hair ties, women's dresses, and silver and turquoise jewelry.

The Hopi cultivates his own small plot of ground, but farming is limited and uncertain. He is usually a stock raiser too, although poor soil and lack of vegetation have necessitated the reduction of many herds according to the range capacity of land at the owner's disposal.

The Apaches

During the prehistoric period, the Apaches drifted southward from northwest Canada, probably following the Rocky Mountains. Among them were groups or bands which were to become known as the Cibecue, Chiricahua, Tonto, and other Apaches. With the passing of time, these and other Athabascan-language-speaking Apache groups were settled in Arizona with the San Carlos and White Mountain Apaches and the Mohaves. Today, older group affiliations have tended to become obscure and the name "Apache" roughly applies to all Apache Indians living on

the Fort Apache, San Carlos, and Camp Verde Reservations. Nevertheless, many indications are present which reveal that some people keep alive feelings of differences between descendants of the several traditional bands.

Although all the Apaches (except the Chiricahuas) raised crops, they were known especially for their skill at hunting and for military feats. (They were the last Indians to lay down their arms.) Their cultural pattern of high mobility is evidenced today in the Phoenix Area in frequent use of the traditional transient Apache type of house - the grass-covered, pole-framed wickiup.

Individual initiative and achievement are still highly prized traits. Yet, a high degree of social dependence on relatives is characteristic of many Apache people. In keeping with this, sharing of food and other necessities among relatives is an established cultural pattern among large numbers of people.

Yuman Groups

The Yuman-speaking peoples, as represented by several tribes, have for many years lived in scattered settlements along the Colorado River. Today, for example, there are the Yumas who live at the Fort Yuma Reservation in California; the Cocopahs located at the Cocopah Reservation in Arizona; the Mohaves who are at scattered sites in Arizona and California including the Colorado River Reservation, the Fort Mohave Reservation, and together with the Apaches, at the Fort McDowell Reservation; and the Maricopas who settled beside the Pimas.

In bygone days, these people gathered food, but tended to place more emphasis on their farming activities. They were characterized by a rather loose-knit social organization based on father-mother-children family units with little attention being paid to formal government. Considerable authority was placed with the father who was clearly the head of his self-sufficient family. Today these people continue to be agriculturalists, essentially.

The Pimas

Often referred to as the "River People," the Pimas are descendants of the canal building, agricultural Hohokam Indians who lived in the region between Florence and Phoenix, Arizona, many centuries ago. Their present-day homes are situated at Gila River and Salt River Reservations. At one time areas of the reservations were well watered and supported stands of cottonwood trees ample enough to provide materials for most housebuilding. Such buildings were and are constructed of cottonwood poles, plastered with adobe mud. Due in part to diminished water supplies and their effect on tree stands, many houses being constructed at present are made of more or less standard modern building materials such as cinder blocks or stuccoed post and siding. The dirt floors seen in many houses are packed so hard that they can be brushed.

Traditionally the Pimas were organized into villages in which older men tended to be the leaders. The individual village was composed of families which, in many cases, were related through the paternal line. By custom, these are basically an agricultural people. In ancient times, they farmed their own land, but in recent years they have increasingly become absentee landlords, and

have sought seasonal jobs many of which are located at nearby off-reservation farms and ranches. They have found it most economical to lease their lands to individuals who can afford to clear and level the ground, and finance construction of wells for purposes of irrigation.

Pima land holdings are less isolated and less arid than are those of the Papago Indians who, while historically less farm-oriented, are often associated with them. The dialects of the Papago language, which is Piman, are almost exactly like their own. In essence, the Pimas and the Papagos are variations of the same people, one real difference being that, in bygone days, the Pimas had plenty of water and the Papagos did not. Their relationships have almost always been close.

The Papagos

The Papago Indian culture has been influenced by the native Mexican culture as well as that of the United States, for the old Papago territory was cut in half by the Gadsden Purchase of 1853, leaving one portion in Mexico. The United States portion of their homeland became the Papago Reservation and was not established formally until 1917. Other Papago Reservations are at San Xavier, Maricopa, and Gila Bend, Arizona. These people continue to move back and forth between Arizona and Mexico in order to visit relatives and to participate in ancient religious festivals. Sometimes called the "Desert People," the Papagos have a tradition of mobility dating back to prehistoric times. During the summer in the desert they practiced agriculture with the aid of flash flood water which was channeled over their gardens. In the fall, winter, and spring the people lived in well-watered places in the mountains where they hunted. Throughout the year the Papagos utilized whatever the surrounding country offered. Periodically they visited their Pima cousins where they traded products of hunting and gathering for the cotton, beans, and squash which were frequently in short supply among the Papagos.

Today, many Papagos who continue to be village-centered move about in search of work and, in spite of the obstacles presented by their surroundings, they engage in some cattle herding and crop raising on their reservations. To some extent, local resources are still used including the red, juicy fruit of the giant cactus. The women and children of the villages gather this fruit which serves as a food (in the forms of fresh fruit, jelly, and a fruit drink). Housebuilding, too, involves the use of desert products (ocatilla stalks are placed side by side, bound with cactus ribs, and plastered with mud). Thus, the Papagos, isolated on their vast reservation, retain many old tribal customs.

The Paiutes

Another desert people, the Paiutes speak the Shoshonean language. They are settled on some of the poorest plateau land in Arizona, California, Nevada, and Utah, but are adept of utilizing the marginal resources about them. Many now live within or adjacent to Nevada on the dry, barren land known as the Great Basin, between the Sierras and the Rocky Mountains. Sand, rock, and sagebrush outline the landscape for miles. The Northern Paiutes wandered over the Nevada region prior to its acquisition by the United States in 1848. They were later joined by other Shoshonean groups and by the Washoe Tribe which settled in west central Nevada.

The Paiutes did not develop elaborate tribal ceremonials or tribal government procedures; nor were they known for their handicrafts. They long depended upon the small animals about them, sewing together rabbit and other small animal skins to provide winter clothing. They gathered berries and roots, along with pinon nuts for food. In keeping with a tradition of mobility, many Paiute families today follow the harvest, finding seasonal work from Nevada to Utah.

Other Smaller Groups

Many other smaller groups, some of them related to the larger tribes but still retaining their distinguishing cultural characteristics, are scattered throughout the Phoenix Area. For example, the Yuman-speaking people, other than those previously mentioned, include the Yavapais, Hualapais, and the Havasupais. Today, these people have reservations along the Colorado River. Another group residing along the Colorado with or near the Mohaves is the Chemehuevi Tribe. This group is linguistically related to the Paiutes of the Kaibab Reservation in Arizona and on several reservations in Nevada and Utah. The Paiutes are similarly related to several Indian groups such as the Goshutes of Utah; the Utes of the Uintah and Ouray Reservation in Utah; the Shoshones of the Duck Valley (Western Shoshone) and other reservations in Nevada; and the Washoes in that State. At one time there were over 100 tribes speaking many languages and dialects in what is now California. Presently, their descendants are scattered at numerous locations, many in the northern and southern parts of that State.

These other groups of the Phoenix Area represent widely divergent ways of life. Living in mountain, seacoast and desert environments throughout what is now the Phoenix Area, to many of them such as the Utes and the Indians of northern and central California, hunting, fishing, and gathering of food were important. To others, such as the Indians of southern California, agriculture provided many of the necessities of life. At present, most groups depend to some extent on agriculture (including herding of cattle and sheep among a number of them) for a share of their income, although seasonal labor is also of considerable importance among these peoples.

Resources

Most of the Indians who live on Federal Indian reservations in Arizona have the never-ending problem of insufficient water supplies. With few exceptions, the land base of each reservation group is insufficient to maintain the resident population. Probably Hoopa Valley in California with its rich supply of commercial timber is the most favorably situated of these reservations. At Fort Yuma, California, and at Gila River, Salt River, and some other reservations in Arizona, irrigated farming and the leasing of agricultural lands constitute the main on-reservation economic undertaking. At most other reservations in the Area, resources stem primarily from livestock enterprises together with minor crop raising.

Education

Indian children in Utah and most of those in Nevada (with the exception of the residents of Goshute Reservation where the Bureau of Indian Affairs has a day school) attend public school, with special financing arranged between the Bureau of Indian Affairs and local school authorities (because of the nontaxable status of

Indian lands). In Arizona, about one-half of the Indian children attend public schools on this same basis; more than one-fourth attend Bureau of Indian Affairs day schools, while somewhat less than one-fourth attend boarding schools, also operated by the Bureau, or mission schools. In 1959, the Bureau of Indian Affairs operated a total of 23 day schools on the Colorado River, Fort Apache, Hopi, Papago, Pima, San Carlos, and Goshute Reservations, and boarding schools at Keams Canyon on the Hopi Reservation, Santa Rosa on the Papago, and Fort Apache on the Fort Apache Reservation. In addition, three off-reservation boarding schools are maintained in the Phoenix Area -- at Phoenix, Arizona; Stewart, Nevada; and Riverside, California. At Riverside practically all students are Navajo while about half of the students at Stewart are of the Navajo Tribe.

Health Status

Indians in the Phoenix Area are still many years behind their non-Indian neighbors. Poverty, scarcity of water, crowded living conditions, isolation, lack of economic opportunity, and limited understanding of good health practices are among the complex factors contributing to a high incidence of illness and early loss of life. Progress is being made toward the control of disease and reducing illness and premature death; however, Indian infant death rates in Arizona, Nevada, and Utah are two to three times greater than the rate in the general population. Striking with particularly high frequency and severity in all age groups and especially among infants are influenza and pneumonia which result in death rates among the Phoenix Area Indians four times that seen in the general population. Tuberculosis is another long-time threat to the well-being of Indian people, causing a death rate among them which is far in excess of that for the population at large.

Measles, chickenpox, and septic sore throat occur with unusual frequency among Indian children. Trachoma, a highly infectious eye disease rarely found in the general population in the United States, has been found to exist in serious proportions among the Indians. A special trachoma diagnostic and treatment program has been under way in Arizona on the Papago, San Carlos, and Fort Apache Reservations. Among other serious problems toward which the Public Health Service is directing considerable attention and effort are the dental needs and nutritional deficiencies among these Indian people.

Diseases alone are not the only contributors to high Indian mortality. In the past several years, accidents have become the leading killer among most Indian groups, and, in the Phoenix Area, the accident death rate is three times that in the population as a whole.

The high incidence of gastroenteric diseases, and probably ailments such as hepatitis and respiratory illnesses, are attributed in large part to poor environmental conditions and crude or primitive practices. Improving sanitation facilities in Indian homes and communities has been made possible by P.L. 86-721, enacted July 31, 1959. Through this authority, the Public Health Service initiated its sanitation facilities construction program. In fiscal year 1960, ten sanitation facilities construction projects were authorized for the Phoenix Area. Stimulated by the opportunity to improve their environmental sanitation, the Indians are participating on a cooperative basis with the Federal Government in several such projects -- some providing labor and other resources at their command, supplementing the resources of the Public Health Service.

Considerable headway is being made in preventing disease and saving lives among southwestern Indians; however, not yet fully realized is the Public Health Service goal of assisting the Indians to enjoy a health level comparable to that of the general population.

Indian Health Services

Health services for Indian beneficiaries in the Phoenix Area are provided directly at Division of Indian Health facilities, through a system of 11 hospitals, five major health centers, and school health centers at three Bureau of Indian Affairs off-reservation boarding schools. At some 40 other field locations, Public Health Service staff of the larger Indian health facilities (or for special activities, Area Office program consultants), as well as private physicians and dentists under contract, provide a variety of health services either on a regularly scheduled or itinerant basis. These include services of physicians at scheduled medical clinics, public health nursing, maternal and child health and school health, dental care, nutrition, health education, medical social service, and sanitation.

Through contractual arrangements with local community facilities, hospital services are provided where no Division of Indian Health hospital is accessible or where the facilities and services are limited. Contracts with private physicians, dentists, clinic groups, and laboratories are in effect for general medical care, specialized consultant services, and related health services. Contracts with State and local health departments are limited; in California, Indian citizens are served in increasing numbers through local programs available to all citizens of the State.

Hospital Care

Seven Public Health Service Indian hospitals are operated in Arizona (excluding the ones serving the Navajo). Six are located on Federal Indian Reservations: Keams Canyon on the Hopi Reservation; Parker on the Colorado River Reservation; Sacaton on the Pima Reservation; San Carlos on the San Carlos Reservation; Whiteriver on the Fort Apache Reservation; and on the San Xavier Reservation (adjacent to the City of Tucson). The seventh, at Phoenix, is a general medical center (referral facility). At present it includes a small tuberculosis unit which is gradually being reduced in capacity, as tuberculous patients are transferred to San Xavier (Tucson) and contract facilities in Tucson.

The Phoenix general hospital is the focal point of the hospital system for the Area satellite health facilities. Patients predominantly from the Arizona reservations are referred to it for specialized care.

The remaining four Public Health Service general hospitals in the Area are located in Nevada and California. The facilities in Nevada are the Owyhee Hospital on the Duck Valley (Western Shoshone) Reservation, and the Schurz Hospital on the Walker River Reservation. The two in California are located

at Hoopa Valley ^{1/} and at Winterhaven, a townsite surrounded by Indian land allotments of the Fort Yuma Reservation.

To provide an acceptable quality of services for its beneficiaries, the Division of Indian Health has undertaken rehabilitation of its existing facilities and construction of new ones in many Indian Health Areas over the past five years. These facilities include hospitals, health centers, clinics, and housing for staff in isolated areas.

The modernization and facility improvement program in the Phoenix Area includes the construction of a new 50-bed general hospital at Sells, Arizona (Papago) now nearing completion; modernization of the Whiteriver (Apache) Hospital (completed in July 1960); the 38-bed replacement hospital at Keams Canyon (Hopi) presently under construction; plans for a hospital to replace the one at San Carlos; and interim measures to improve facilities at the Phoenix Indian Hospital (recently a major alteration project at Phoenix has been approved). Among other improvements were the construction of a health center at Santa Rosa (Papago) in the summer of 1959, and repairs and minor alterations at the other general hospitals and health stations. Steps have also been taken to construct and modernize housing critically needed to insure retention of adequate staff at these health facilities.

In addition to the direct operations, contractual or open-market arrangements are in effect with local community hospitals for general care of Indian patients in all four States in the Area. Care of Indian tuberculous patients at Phoenix is being reduced as more patients are hospitalized at San Xavier or being referred to the Oshrin Hospital, Tucson, under contract (eventually San Xavier will be converted fully for tuberculosis patient care after the new Sells Hospital is in operation). Through contractual arrangements a treatment program for crippled children is provided at the Comstock Children's Hospital, Tucson, and rehabilitation services are furnished by staff of the Crippled Children's Division of the Arizona State Department of Public Welfare.

In California, Indian tuberculous and mental patients are hospitalized in State facilities on the same basis as other citizens in the State. Mental patients in Arizona and Nevada are admitted to State institutions, under contract with the Public Health Service. In Utah, Indian mental patients are cared for in State institutions on the same basis as all other citizens.

1/ As this material is being prepared for publication, arrangements are under way for a change in operation of the health program for Hoopa Valley Reservation. The new Klamath-Trinity Hospital, Hoopa, California, will become the primary hospital resource for Indian beneficiaries. This community facility was constructed with assistance of Hill-Burton funds and Indian health Federal funds authorized under Public Law 85-151. The PHS hospital operation at Hoopa will be discontinued by January 1961.

Other Facilities and Services

The Public Health Service operates four Indian health centers within the Arizona portion of the Phoenix Area; these are located at Bylas, Peach Springs, Santa Rosa, and Sells. A fifth health center is located at Fort Duchesne in Utah. Each center is staffed with some full-time personnel - usually including a physician, clinical and public health nurses, dental staff, and a medical record assistant. If large enough Indian communities are within the service unit, the health center also has on its staff sanitarian aides and community workers, who serve in health education activities. Throughout the Phoenix Area, the Public Health Service provides general medical and preventive health services at numerous other health facilities and locations outside of the hospitals and health centers. Some are staffed by one or more Public Health Service personnel who are stationed in the local community; some are served by traveling teams of medical and allied health personnel whose permanent station may be a Public Health Service Indian hospital or health center; others are served by local physicians and dentists under contract to the Public Health Service. In addition to the provision of a substantial volume of diagnostic and curative services, an intensive preventive health program - public health nursing, sanitation, dental health, and health education - is carried on by field health staff in Indian home communities.

School health centers are maintained by the Public Health Service for students at three Bureau of Indian Affairs off-reservation boarding schools: Phoenix, Arizona; Stewart, Nevada; and Riverside, California. At each of these institutions Public Health Service nurses are assigned on full-time duty, and medical and dental care are provided to students by local private physicians and dentists through contractual arrangements with the Public Health Service.

The Phoenix Area Office staff provides to field personnel special consultant service and program guidance in all professional areas including, among others, maternal and child health (for example, crippled children's services and school health), public health nursing, oral health, medical social service, nutrition, sanitary engineering, pharmacy, and health education.

Other special services available to the Phoenix Area include direction and orientation of community workers in health education activities - an in-service training program directed by health educators assigned to Albuquerque and Window Rock, and made possible through Division of Indian Health contracts with the University of California and the University of North Carolina Schools of Public Health.

An activity of the Division which benefits the Phoenix Area (but serves the entire Division), is the training of young Indian men and women to prepare them for participation in providing health services to their own people. Through the PHS Indian School of Practical Nursing at Albuquerque, a one-year course including clinical experience is offered to prepare Indian students for qualifying as trained practical nurses. Enrollment is open to young people who are one-quarter or more Indian and who have completed a 4-year high school course. Many students are drawn from the reservations in the Phoenix Area and after graduation (and passing State Board Examinations) they are qualified as licensed practical nurses and are assigned to PHS Indian hospitals and health centers.

In addition, special in-service training and short courses are offered to Indian men and women to qualify them as sanitarian aides, nursing aides, and dental assistants. These Indian health workers are employed in Indian Health facilities and contribute to providing services in their reservation communities.

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A major goal of the Public Health Service is to help the Indians help themselves to better health - toward a health level comparable to that of the general population. In order to do this, the available Federal, State, and local resources as well as private resources are being brought to bear on the problems of Indian health. Tribal and intertribal consultation is obtained in order to bring Indian thinking to bear on their own problems. In many instances, these problems are complex, since so many of these people live in isolated, difficult settings and have ways of life which communities find not easy to understand - this is the case in Arizona, for example, where Indians comprise about seven percent of all of the State's citizens, the highest proportion of any State, except Alaska. Because Indian health problems are unique, special approaches must be brought to bear on them. In some instances, the combination of resources of State and local health agencies and contract services can meet these needs; in other instances, it cannot, and a direct Public Health Service operating program is required over a period of many years. In any case, effort must be intensified, wherever indicated, toward reducing the backlog of poor health, improving the quantity and quality of health services, bringing to the Indian people an understanding of the benefits of modern medicine and preventive service, and stimulating combined effort of the Indian people and local communities in the solution of Indian health problems.

Colorado River Health Service Unit

COLORADO RIVER RESERVATION, ARIZONA and CALIFORNIA

LOCATION: Principally in Yuma County, Arizona. Bounded on west by the Colorado River. Northern tip extends into parts of Riverside and San Bernardino Counties, California. Situated south of Parker Dam.

Principal settlements (1950 pop.) - Parker (pop. 1,201) and Poston (pop. 100), both in Arizona and in northern portion of the reservation.

Nearest off-reservation towns (1950 pop.) - Ehrenberg, Arizona (ghost town of the Colorado River) and Blythe, California (pop. 4,089), each located a few miles south of reservation. Hope, Arizona, southeast of Parker; Needles, California (pop. 4,051), 70 miles northwest of Parker.

BIA Field Office - Colorado River Agency, Parker, Arizona

LAND: 242,700 acres, principally tribally owned and partially leased for non-Indian operation. Some holdings allotted to individual families in 40 and 80 acre tracts. Land is fertile where cleared and irrigated; cotton, forage crops and truck gardens flourish here. Greater part is arid, open grazing land.

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TRIBES: Mohave, Chemehuevi, and other tribes. Some Navajo and Hopi families have been resettled here.

POPULATION: 1,800 estimated in PHS service area, 1959
1,064 enrolled tribal members in 1950

CHARACTERISTICS: Blood quantum - 87% fully Indian in 1950; 95% one-half or more Indian.

Homes - Typical dwelling a two-room frame house. 5.1 persons per dwelling unit (median). 1.8 persons per room (median).

Education - From fragmentary information it appears that one-half of adults aged 25 and older have grade school education (1950) but one out of 5 had no schooling; 90% of persons aged 6 and older speak and read English. Most children aged 6-18 attend school, about one-fourth at BIA day school, Parker; more than one-half at public elementary schools at Poston and Parker; remainder attend Northern Yuma County High School.

Livelihood - Average family income the highest of any Indian group in Arizona and somewhat above that for the rural farm family in the State. Recent study reveals "chronic unemployment" problem, however. Source - Principally from farm crops and wage work.

THE
PEOPLE

COLORADO RIVER RESERVATION, ARIZONA and CALIFORNIA
(continued)

INDIAN HEALTH FACILITIES: Public Health Service Indian
(Colorado River) Hospital at Parker, Arizona. In 1960 fiscal
year there were -

29 beds available;
559 admissions and 51 births in hospital;
13 average daily inpatient load;
10,432 outpatient visits.

Dental officer attends hospital and clinic patients. Specialized
services on a referral basis available at the PHS Indian Hospital,
Phoenix.

HEALTH
RESOURCES

Environmental sanitation program by sanitarian aide stationed
at Parker.

OTHER HEALTH RESOURCES: Limited public health nursing service
available from Yuma County, including some visits to public
schools.

Hospital care at Federal expense may be authorized at
community hospitals, mainly the 80-bed Parkview Hospital
and the 100-bed Yuma County General Hospital, both at
Yuma, Arizona, 125 miles south of Parker, California.

* * * * *

SPECIAL
PROBLEMS

HEALTH STATUS: Accidents, diseases of the respiratory and digestive
systems were among the chief causes for hospitalization in
fiscal year 1958. Measles, influenza and gastroenteritis were
the leading notifiable diseases 1958-1959. Investigation
disclosed considerable trachoma.

OTHER: Large portions of the reservation are uncleared for purposes
of cultivation. Considerable capital would be required to
prepare land and to extend present irrigation systems.

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FIELD NOTES AND OBSERVATIONS

HUALAPAI RESERVATION, ARIZONA

LOCATION: Northwestern Arizona, in Coconino and Mohave Counties. High land to south of and overlooking Granite Gorge of the Colorado River. Reservation is crescent shaped, the horns extending northward. Southern boundary line parallels a short strip of U. S. Highway #66. A small area, (Big Sandy) 40 miles due south of reservation proper (but farther away by road), is also considered a part of the reservation. It is located near Cane Springs where Trout Creek joins the Big Sandy River.

Principal settlements - Peach Springs (1950 pop. 129) on U. S. Highway #66 is the center of Federal Government activity on the reservation and the principal Indian community. No other villages. A few range camps in remote northern sectors.

Nearest off-reservation towns in Arizona (1950 pop.) - Grand Canyon (pop. 595), 40 miles east of edge of reservation. BIA Subagency is at Valentine (pop. 50). Distance from Peach Springs: Ashfork (pop. 681), 61 miles east; Cottonwood (pop. 1,300), 150 miles southeast; Flagstaff (pop. 7,663), 110 miles east; Kingman (pop. 3,966), 50 miles southwest; Seligman (pop. 764), 37 miles east; Williams (pop. 2,152), 78 miles east.

THE
RESERVATION

BIA Field Office - Colorado River Agency, Parker, Arizona

LAND: 997,000 acres of land, including 819 acres near Cane Springs. Tribally owned. Open brush land suitable for grazing; cliffs, canyons and washes. Some timber and family farm tracts where water is available.

* * * * *

TRIBE: Hualapai

POPULATION: 700 estimated in PHS service area, 1959
561 enrolled tribal members in 1950

THE
PEOPLE

CHARACTERISTICS: Blood quantum - 93% fully Indian in 1950; 100% one-half or more Indian.

Homes - Overcrowded. Majority of families have less than 3 rooms per residence. Water supply usually hauled from central wells or water hydrant in yard. Human waste disposal unsatisfactory at 92% of the homes.

Education - Most of adults aged 25 and older had 6 years of grade school (1950); two-thirds of persons aged 45 and older read and speak English.

Livelihood - Among the lowest earning Indian groups in Arizona. Source - Livestock and cattle, supplemented by seasonal agricultural and wage labor. A tribal sawmill has provided low cost, rough lumber for home building.

HUALAPAI RESERVATION, ARIZONA (continued)

INDIAN HEALTH FACILITIES: Public Health Service Indian Health Center at Peach Springs with full-time physician and nursing coverage. Specialized services on a referral basis available at the PHS Indian Hospital, Phoenix. Environmental sanitation program by sanitarian aide stationed at Peach Springs.

HEALTH RESOURCES

OTHER HEALTH RESOURCES: Medical services and dental care by local private physicians and dentists in Kingman and Williams areas through contract with the Public Health Service. Hospital care in this portion of the Colorado River Service Unit is usually at community hospitals at Federal expense, mainly the 44-bed Mohave General Hospital, Kingman, 50 miles southwest of Peach Springs, and the 35-bed Williams Hospital, Williams, 78 miles east.

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OTHER NOTES

SPECIAL PROBLEMS: An isolated area of few natural resources. Arid land and little rainfall make for subsistence living conditions.

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FIELD NOTES AND OBSERVATIONS

Colorado River Health Service Unit

SMALL WESTERN ARIZONA INDIAN GROUPS, ARIZONA
extending into CALIFORNIA and NEVADA

Several thousand Indians live on small reservations scattered over western Arizona and along the Colorado River at the Arizona State line, in California and Nevada.

BIA Field Office

Camp Verde Reservation, Ariz.
Chemehuevi Reservation, Calif.
Fort Mohave Reservation, Ariz.,
Calif., Nev.
Havasupai Reservation, Ariz.
Yavapai Reservation, Ariz.
Kaibab Reservation, Ariz.

Colorado River
Agency,
Parker, Ariz.

Hopi Agency,
Keams Canyon, Ariz.

LOCATION and LAND (1950 pop.):

Camp Verde Reservation - Central Arizona, in eastern Yavapai County. 500 tribally owned acres of homesite farming and grazing land along the Verde River, within the Prescott National Forest. Small compact Indian settlement in outskirts of adjacent town of Camp Verde, called "Camp Verde Indian Reservation" by the Indian people, and a few miles to northwest is another settlement known as "Middle Verde Indian Reservation." Nearby towns in Arizona: Camp Verde (pop. 285), the closest; Clarkdale (pop. 1,609) and Cottonwood (pop. 1,300), each 20 miles from reservation and to the north.

Chemehuevi Reservation - San Bernardino County, California on western shore of the Colorado River. Some 28,000 acres of tribal land remain after sale of many acres to the Metropolitan Water District of Southern California, City of Los Angeles, for reservoir site (Havasu Lake) behind Parker Dam. Indians no longer live here; have relocated, especially with the Colorado River group, Arizona, and the Moapa - Las Vegas groups, Nevada.

Fort Mohave Reservation - Essentially on eastern side of Colorado River (in Mohave County, Arizona); northern tip extends west of river (into small parts of San Bernardino County, California and Clark County, Nevada). South of the Davis Dam and north of the Parker Dam. 27,500 acres of undeveloped brushy grazing and woodland. Most Mohave Indians live away from reservation in outskirts of adjacent town of Needles, California (pop. 4,051). Kingman, Arizona (pop. 3,966) is 25 miles east of reservation border.

Havasupai Reservation - 3,079 acres within the Grand Canyon National Park (Coconino County, Arizona) of which only 500 acres on the Canyon floor are irrigated. Corn, squash, melons, peaches and apricots are occasionally grown here. In addition, 286,000 acres administered by the National Park Service and the Forest Service are also used by the Havasupai under free grazing permit.

THE
RESERVATION

SMALL WESTERN ARIZONA INDIAN GROUPS, ARIZONA
extending into CALIFORNIA and NEVADA (continued)

Only Indian community, Supai, a mile below the Canyon rim. Supai can be reached by two roads; one leads from Grand Canyon village (pop. 595), the other from Peach Springs (pop. 129), 50 and 70 miles away respectively; last 8-12 miles down into the canyon must be traversed on foot or by horseback. Kingman, Arizona (pop. 3,966) is 133 miles south of Supai.

Yavapai Reservation - In the Chino Valley, Yavapai County, Arizona, bounded to east and west by Prescott National Forest. Just outside of Prescott, Arizona (pop. 6,764). 71 acres of tribal land. In addition, 1,300 acres constituting the Whipple Military Reserve are used by the tribe for grazing. Cottonwood (pop. 1,300) and Clarkdale (pop. 1,609), each 30 miles by road from edge of reservation; Flagstaff (pop. 7,663) 92 miles north-east of Prescott; Williams (pop. 2,152) 69 miles north of Prescott.

Kaibab Reservation - Over 120,000 acres of tribally owned land in northern part of Mohave and Coconino Counties of Arizona, at the Utah line. Some forest and timber, but principally open grazing land. One Indian settlement, Moccasin. Fredonia, Arizona (pop. 400) to the east, and Short Creek, Arizona (pop. 90) to the west, are the closest towns nearby. Hospital resources at St. George, Utah (pop. 4,562) 100 miles north of Moccasin used by Indian people living at Moccasin and Fredonia.

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CHARACTERISTICS:

Reservation	Tribe	Estimated in PHS service area 1959	Percent fully Indian 1950
Camp Verde	Apache	500, in Ariz.	100%
Chemehuevi	Chemehuevi	group relocated	71%
Fort Mohave	Mohave	400, Needles, California	not known
Havasupai	Havasupai	400, in Ariz.	99%
Yavapai	Yavapai	100, in Ariz.	97%
Kaibab	Paiute	100, in Ariz.	reported fully Indian for the greater part.

THE
PEOPLE

SMALL WESTERN ARIZONA INDIAN GROUPS, ARIZONA
extending into CALIFORNIA and NEVADA (continued)

It is probable the majority of Indians at each reservation:

- have some grade school education, although older persons may not be able to read English. Almost all children aged 6 - 18 now attend public school;
- have small frame houses, condition poor; no modern conveniences;
- have reservation holdings which lack natural resources and irrigation. Land base is inadequate to support even a small percentage of the reservation population;
- have a limited family income from seasonal agricultural and wage labor. Employment at off-reservation towns the chief source of livelihood. Yavapai are more self-sufficient than other groups in the region.

* * * * *

INDIAN HEALTH FACILITIES: Medical services on an itinerant basis at Camp Verde, Clarkdale, Middle Verde, and Supai, provided through the Public Health Service Indian Hospital, Phoenix where specialized services are also available on a referral basis. Environmental sanitation services available from Area Office staff upon request.

HEALTH
RESOURCES

OTHER HEALTH RESOURCES: Medical and dental care by local private physicians and dentists through contract with the Public Health Service at Kingman and Williams. This care is authorized by medical officer in charge of the PHS Indian Health Center at Peach Springs. Hospital care in this portion of the Colorado River Health Service Unit is largely at community hospitals at Federal expense, mainly the --

- 48-bed Flagstaff Hospital, Flagstaff, Arizona (Havasupai, Yavapai);
- 10-bed Grand Canyon Hospital, Grand Canyon, Arizona (Havasupai);
- 38-bed Marcus J. Lawrence Hospital, Cottonwood, Arizona (Camp Verde, Middle Verde);
- 44-bed Mohave General Hospital, Kingman, Arizona (Havasupai, Hualapai);
- 22-bed Williams Hospital, Williams, Arizona (Havasupai, Yavapai).

SMALL WESTERN ARIZONA INDIAN GROUPS, ARIZONA
extending into CALIFORNIA and NEVADA (continued)

HEALTH STATUS: Gastritis the leading notifiable disease 1958-1959.

SPECIAL
PROBLEMS

OTHER: Lack of employment opportunities and lack of activity prompt young adults to move away from reservations. Most Indians who live on Indian holdings tend to be either children or older people.

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FIELD NOTES AND OBSERVATIONS

Fort Apache Health Service Unit

FORT APACHE RESERVATION, ARIZONA

THE
RESERVATION

LOCATION: Southeast Arizona, close to New Mexico border. Principally in Apache, Gila, and Navajo Counties. Surrounded on east, north, and west by National Forests. Fort Apache Reservation is adjacent to and directly north of the San Carlos Reservation. The two are separated by headwaters of the Salt River flowing west, and the Black River flowing east. U. S. Highway #60 cuts diagonally through both reservations. Principal settlements (1950 pop.) - Fort Apache (pop. 400), Whiteriver (pop. 200), and smaller communities of Cedar Creek, Cibecue, and Carrizo. McNary (pop. 1,902) is located within northeast corner of reservation but is not primarily an Indian community. Nearest off-reservation towns in Arizona (1950 pop.) - Globe (pop. 6,419) is closest town to southwest; Snowflake (pop. 929), just beyond the Sitgreaves National Forest, north of reservation; Holbrook (pop. 2,336), some 20 miles farther north; Show Low (pop. 450), 10 miles northwest of McNary.

BIA Field Office - Fort Apache Agency, Whiteriver, Arizona

LAND: 1,664,872 acres held in common by the tribe. Majority of acreage is mountainous, with some timber. Best suited to grazing. Limited amount of valley land used for family farm tracts and agriculture.

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THE
PEOPLE

TRIBE: Apache

POPULATION: 4,400 estimated in PHS service area, 1959
3,673 enrolled tribal members

CHARACTERISTICS: Blood quantum - 97% fully Indian in 1950; 99% one-half or more Indian.

Homes - Typical dwelling a 1-2 room frame house, but there are still some native Apache wickiups (houses made of grass thrown over poles). Grossly overcrowded with at least 4 persons in most dwelling units. More than 85% of families use unsafe water, the large majority hauling it as much as 3 miles. 45% of families entirely lack facilities for excreta disposal, only 4% have inside toilet facilities.

Education - Half of adults aged 25 and older had 6.4 years or more schooling (1950); 75% of persons aged 6 and older read and speak English, but many older persons need an interpreter to communicate in English. Nine out of 10 children aged 6-18 attended school in 1958, mostly public school but some attend BIA day school at Cibecue and Cedar Creek and mission schools at Cibecue and East Fork.

FORT APACHE RESERVATION, ARIZONA (continued)

Livelihood - Average family income low, less than one-half that of the usual farm family in the State. Source - Sale of cattle and horses, supplemented by wage labor in towns nearby and on farms.

Tribal income - Substantial. Source - Cattle, tribal sawmill, sale of gravel and mining leases. Tribal funds are used for reservation developments.

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INDIAN HEALTH FACILITIES: Public Health Service Indian (Fort Apache) Hospital at Whiteriver. In 1960 fiscal year there were -

34 beds available;
1,417 admissions and 195 births in hospital;
22 average daily inpatient load;
17,977 outpatient visits.

Dental officer renders preventive, corrective and educational services at hospital and outpatient clinic. Some Fort Apache Reservation Indians also go to the PHS Indian Hospital at San Carlos. Patients requiring specialized care referred to PHS Indian Hospital, Phoenix.

Major modernization of hospital completed in July 1960 - 38 beds and 9 bassinets available.

Medical services on an itinerant basis at Cibecue, provided through the PHS Hospital at Whiteriver; also to students at Whiteriver public school, BIA Cibecue and Cedar Creek day schools, mission schools nearby, and at the BIA Theodore Roosevelt Vocational Indian Boarding School, Fort Apache. Environmental sanitation services provided by sanitarian aide from Whiteriver.

A community worker (health) provides health education services.

OTHER HEALTH RESOURCES: Emergency dental care by local private dentist at Show Low, through contract with PHS.

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HEALTH STATUS: There were 20 diagnosed cases of infectious hepatitis at Fort Apache, November and December 1958. Gastrointestinal disorders were the leading notifiable diseases reported, followed by influenza and pneumonia, 1958-1959. Diseases of the respiratory system were the principal cause of hospitalization, fiscal year 1958.

OTHER: Communication between communities on reservation is difficult and uncertain. Roads are poor. Mountains and streams are major obstacles to travel.

SPECIAL PROBLEMS

HOPI RESERVATION, ARIZONA

LOCATION: Northeast Arizona in Navajo County. Extremely isolated; totally surrounded by the Navajo Reservation.

Principal settlements - State Route 3 divides the reservation north and south. Along this road or at varying distances off of it are many Hopi villages, among them -

Near the first mesa - Hano, Polacca, Sichomovi, and Walpi;

Second mesa - Mishongnovi, Shipolovi, Shongopovi, and Toreva;

Third mesa - Bacabi, Hotevilla, Oraibi, and New Oraibi. Keams Canyon is the center of Federal Government activities on the reservation, but is not an Indian settlement.

Nearest off-reservation towns in Arizona (1950 pop.) - Mileage must not be judged by ordinary standards because of poor roads. Holbrook (pop. 2,336) and Winslow (pop. 6,518) are 73 and 107 miles south of Keams Canyon. Two towns on the Navajo Reservation, Ganado to east and Tuba City to west, are 45 and 85 miles from Keams Canyon.

BIA Field Office - Hopi Agency, Keams Canyon, Arizona

LAND: Exact boundaries and acreage ownership of Hopi Reservation are in dispute. By Executive Order, in 1882, almost 2½ million acres were reserved for the Hopi Tribe and other Indians residing in the area (see map). However, since 1937 the Hopi have been administratively limited to the use of some 630,000 acres coinciding with BIA Land Management District #6. The most recent court action to resolve this question was filed by the Hopi Tribe in 1958.

Territory distinguished by its sandstone mesas -- flat topped, rocky heights jutting into the desert. Deep gulleys and washes like small canyons separate the mesas. Around the bases of the cliffs, springs rise from underground sources to the north. Gardens are pockets of land in slopes of mesa, irrigated by spring seepage. Land is principally suited to open grazing of sheep, but fertile areas in the valleys used for cornfields and farming. Seasonal rains provide water here. Some partially developed coal resources.

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TRIBES: Principally Hopi; some Navajo and other tribes.

POPULATION: 4,900 estimated in PHS service area, 1959, including some 1,500 Navajos in immediately adjacent land unit. 3,528 enrolled tribal members in 1950.

CHARACTERISTICS: Blood quantum - 92% fully Indian in 1950.

Homes - Typical dwellings stone and adobe 2-room structure; built close together, often high on the mesas. 5.3 persons per dwelling unit (median). 2.2 persons per room (median).

Approximately 95% are without running water or sewage facilities.

THE RESERVATION

THE PEOPLE

HOPI RESERVATION, ARIZONA (continued)

Education - Half of adults aged 25 and older had 7 years or more schooling, but 1 out of 5 had not completed a single year of school (1950); only one-half of persons aged 45 and older read and speak English. The expanded education and school construction program on the Navajo-Hopi Reservations has made school facilities available to most Hopi children. In 1959, two-thirds were enrolled at BIA schools, one-third at off-reservation public schools.

Livelihood - Average family income extremely low, at subsistence level, and (like the Navajo) below the level of other Indian reservation families in Arizona. Source - Seasonal day labor, principally fire fighting, sheep and wool; family gardens.

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INDIAN HEALTH FACILITIES: Public Health Service Indian (Hopi) Hospital at Keams Canyon. Construction of new 38-bed hospital to replace outmoded facility now under way. About 60% of the patients are Navajo. In 1959 fiscal year, last year of full operation of old hospital, there were -

43 beds available;
1,252 admissions and 292 births in hospital;
25 average daily inpatient load;
12,730 outpatient visits.

During 1960, the Toreva clinic facilities were converted for inpatient care, with 18 available beds, for temporary use, while new hospital being constructed.

Dental officer provides preventive, corrective and educational services at hospital and outpatient clinic. Hopi Indians also obtain medical services at the PHS Indian hospitals at Winslow and at Tuba City.

Patients requiring specialized care referred to PHS Indian hospitals at Fort Defiance and Phoenix.

Medical services on an itinerant basis at Hotevilla, Oraibi, and Polacca, through the PHS Indian hospital staff

Environmental sanitation program on reservation-wide basis conducted by two sanitarian aides.

A community worker (health) provides health education services.

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HEALTH STATUS: Upper respiratory (mainly influenza and pneumonia) and digestive system diseases were among the leading causes of hospitalization in fiscal year 1958, and the notifiable diseases most frequently reported 1958-1959.

OTHER: The Hopi must contend against many handicaps, among them -- drought; poor soil (even with projected irrigation and other economic developments the land can hardly support one-half the present population); poor roads; and lack of stable community life for those who seek off-reservation employment.

SPECIAL PROBLEMS

Papago Health Service Unit

PAPAGO RESERVATION, ARIZONA

LOCATION: Sonora Desert region of south central Arizona, between Organ Pipe Cactus National Monument to southwest and Baboquivari Mountains to east. Southern boundary touches Mexican border. Paved road from Tucson to Ajo forms east-west transversal through reservation; unimproved road runs from center to northern border.

Principal settlements (1950 pop.) - Sells (pop. 789) the center of government activities and of Indian homes. About 20 villages group about Sells in all directions, among them: Gu Achi (Santa Rosa, pop. 380), 38 miles north; Pisinemo (pop. 242), 45 miles northwest; San Miguel (pop. 256), 23 miles south; Topawa (pop. 304), 9 miles south. Chuichu in northeast corner of reservation. Some 40 additional settlements.

Nearest off-reservation towns in Arizona (1950 pop.) - Ajo (pop. 5,817), 74 miles northwest of Sells; Casa Grande (pop. 4,181), 85 miles north; Tucson (pop. 48,774), 63 miles east of Sells. City of Phoenix, 146 miles northwest.

BIA Field Office - Papago Agency, Sells, Arizona

THE
RESERVATION

LAND: Over 2,771,000 acres, all owned by tribe. Flat contour, broken occasionally by small rocky mountain ranges. An arid region with desert type vegetation -- cactus, mesquite -- road runners and rattle snakes. Typically $3\frac{1}{2}$ square miles of land are required to support 10 head of cattle. Prolonged droughts; occasional torrential rains have little penetration, rapid runoff. Summer heat.

Soils are basically of good productive quality but show deterioration from erosion and silting. Cattle and horses have depleted ground cover and with it the top layer of fertile soil and humus. Water and forage planting needed to restore land. Only 40% of Papago range lands now within reach of permanent stock water.

Small irrigation project at Chuichu in Casa Grande Valley to the north could be extended. Land management districts to south -- Baboquivari, Chukut Kuk, and Sells -- are the most prosperous because of flood farming and forage crops. Contract awarded for construction of 14 earth-filled flood control structures in the Baboquivari district.

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THE
PEOPLE

TRIBE: Papago

POPULATION: Estimate varies from 8,000 to a maximum of 9,000 in PHS service area, 1959. This figure includes 600 Papago at San Xavier Reservation.

PAPAGO RESERVATION, ARIZONA (continued)

CHARACTERISTICS: Blood quantum - 97% fully Indian in 1950; 99% one-half or more Indian.

Homes - Typical dwelling a 2-3 room house of adobe brick or of poles plastered with mud. 5 persons per unit (median). Water obtained from communal wells, hauled to the homes. Satisfactory human waste disposal facilities not available for majority of population.

Education - (Data refer to entire Papago Health Service Unit.) One-half of adults aged 25 and older had 4.1 years or less of schooling; 21% of persons aged 45 and older could read and write (1950). By 1958, due to accelerated program 96% of children aged 6-18 attended school; more than one-third in public school; one-fifth in mission schools; the remainder at BIA day schools at Chuichu, Gu Vo (Kerwo), Santa Rosa Ranch, Sells Consolidated and Vaya Chin or at BIA boarding schools.

Livelihood - Average family income low, about two-thirds that for all rural farm families in State. On the average, family income is above that of the Navajo, but the higher figure reflects the most prosperous segment who raise cattle, conduct small business, or find agricultural and mining jobs. Many live at bare subsistence level. Small income from a few cattle, marginal farming, migratory wage labor. In contrast to the Navajo, the Papago subsurface water and mineral rights are in dispute.

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INDIAN HEALTH FACILITIES: The BIA Oasis Hospital at Sells was destroyed by fire in June 1947. A new 50-bed Public Health Service Indian Hospital at Sells now under construction will be opened early in 1961. Until new Sells Hospital completed, most Papago continue to use the PHS Indian Hospital (San Xavier) near Tucson; those from the north go to the PHS Indian Hospital (Pima) at Sacaton. Patients requiring specialized care referred to the PHS Indian Hospital at Phoenix.

Public Health Service Indian Health Centers at Sells and Santa Rosa with full-time physician and nursing coverage. Dental officer at Santa Rosa.

Physician and public health nursing services provided on an itinerant basis at numerous reservation settlements.

Environmental sanitation program conducted by 3 sanitarian aides. Under special sanitation facilities legislation (P.L. 86-121) watering point protection and water storage facility projects at 6 Reservation communities - Kaka, Covered Wells, Gunsight, Hickiwan, Sii-Nakya, and Vamori - among the first emergency projects authorized.

A community worker (health) provides health education services.

HEALTH RESOURCES

PAPAGO RESERVATION, ARIZONA (continued)

OTHER HEALTH RESOURCES: Emergency hospital care at Federal expense may be authorized at community hospitals, mainly the 39-bed Hoemake Cooperative Hospital, Casa Grande, 85 miles north of Sells; also at 314-bed St. Mary's Hospital and the 237-bed Tucson Medical Center, both at Tucson, 63 miles east of Sells.

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SPECIAL PROBLEMS

HEALTH STATUS: Infectious disease rates extremely high, particularly for gastritis, pneumonia, and respiratory diseases and dysentery. Special survey 1958 revealed 226 cases of active trachoma on reservation; in 1959, 182 additional cases were reported.

OTHER: A vast area; great distances must be traveled by Indians to obtain medical care. Few stores where essentials may be purchased on reservation. Transportation inadequate, roads poor. Telephone communication lacking at many places.

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FIELD NOTES AND OBSERVATIONS

SAN XAVIER RESERVATION, ARIZONA

LOCATION: Pima County, about 70 miles east of Sells (Papago Reservation) and just south of Tucson. Bordered on east by Santa Cruz River and Southern Pacific Railroad tracks; on west by Robles Ranch (Three Points).

Principal settlements - No Indian villages as such. A few homes at San Xavier del Bac Mission (site of church completed by Spaniards about 1797); some Indian homes near San Xavier Hospital near Mission.

Nearest off-reservation towns in Arizona (1950 pop.) - Tucson (pop. 48,774) is 9 miles directly north; Nogales (pop. 6,153) is 50 or more miles south, and Casa Grande (pop. 4,181) is some 75 miles to the northwest.

THE RESERVATION

BIA Field Office - Papago Agency, Sells, Arizona

LAND: Over 78,000 acres, more than one-half allotted to Indian families, the remainder tribally owned. Mostly open grazing ranch land with some small irrigated farm tracts along the Santa Cruz River. The drilling of wells was necessary to water 1,510 acres as part of Bureau of Reclamation Project undertaken at the time of the building of the Coolidge Dam. Increased acreage could be farmed if additional wells were drilled.

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TRIBE: Papago

POPULATION: 600 estimated in PHS service area, 1959
(See Papago Reservation)

CHARACTERISTICS: Blood quantum - 99% fully Indian.

Homes - Typical dwelling a 2-3 room house of adobe brick or of poles plastered with adobe mud. 4-5 persons per dwelling unit. Most Indians haul water for domestic uses from central sources some of which have water which is not of safe quality. Human waste disposal facilities are unsatisfactory. Some Papago live in modern homes with greater conveniences, however.

Education - (Data refer to entire Papago Health Service Unit.) One-half of adults aged 25 and older had 4.1 years or less of schooling; 21% of persons aged 45 and older could read and write (1950). By 1958, due to accelerated educational program, 96% of children aged 6-18 attended school; more than one-third in public school; one-fifth in mission schools; the remainder at BIA day schools.

THE PEOPLE

SAN XAVIER RESERVATION, ARIZONA (continued)

Livelihood - Average family income low. Comparable to that of Papago Reservation. Source - Livestock, farming, some wage employment in Tucson.

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INDIAN HEALTH FACILITIES: Public Health Service Indian (San Xavier) Hospital at Tucson was converted from a tuberculosis sanatorium to a general hospital in June 1947 when the BIA Oasis Hospital at Sells was destroyed by fire. Until new hospital at Sells is completed (early 1961), the San Xavier Hospital will continue to be used by Indians of the Papago Reservation. During fiscal year 1960 a small tuberculosis unit was opened at San Xavier, for patients transferred from Phoenix. In that fiscal year there were -

60 beds available (including 20 for TB patients);
621 admissions and 92 births in hospital;
38 average daily inpatient load;
3,086 outpatient visits.

HEALTH RESOURCES

Local private physicians in Tucson, through contract with PHS, treat Indians requiring specialized care at this hospital or at its outpatient clinic. Patients with complicated medical and surgical diagnostic and treatment problems are referred to the PHS Indian Hospital at Phoenix.

Dental care by local private dentists under contract.

Environmental sanitation services by sanitarian stationed at reservation.

Medical social worker serves at hospital, and also at contract facilities.

OTHER HEALTH RESOURCES: Hospital care may be authorized at Federal expense at community hospitals, mainly the 314-bed St. Mary's Hospital and the 237-bed Tucson Medical Center, both at Tucson, 9 miles from the reservation.

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HEALTH STATUS: Diseases of the respiratory system (chiefly influenza and pneumonia), diseases of the digestive system, and accidents were among the principal causes of hospitalization during fiscal year 1959.

SPECIAL PROBLEMS

OTHER: Reservation was established in 1870 with the intent of retaining for the Papago Indians some of the rich valley lands they formerly occupied. Irrigation of land from the Santa Cruz River was practiced, but by 1890 non-Indian settlement around Tucson and accompanying increase of water use caused a failing water supply at San Xavier. By 1914, lands could no longer be irrigated by gravity diversion because of lowering of the river bed by erosion. Irrigation now dependent upon drilling of wells. Several wells have recently been constructed.

Pima Health Service Unit

FORT (or Camp) McDOWELL RESERVATION, ARIZONA

THE RESERVATION

LOCATION: Central Arizona, in Maricopa County; Northeast of Phoenix and of the Gila River (Pima) Reservation; south of the Bartlett Dam and Reservoir; northwest of the Stewart Mountain Dam. Surrounded to the north and east by the Tonto National Forest. Bisected from north to south by the Verde River. Southern tip of the Fort McDowell Reservation forms northern boundary of the Salt River Reservation.

Principal settlements - Fort McDowell (1950 pop. 226).

Nearest off-reservation towns in Arizona (1950 pop.) - Distance to the south from Fort McDowell -- Mesa (pop. 16,790), 20 miles and Tempe (pop. 7,684), 35 miles. Phoenix is 30 miles to the south.

BIA Field Office - Pima Agency, Sacaton, Arizona

LAND: More than 24,600 acres, tribally owned. Mostly undeveloped dry, open grazing land with a few family farm tracts in the river bottom lands.

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TRIBES: Mohave-Apache and other tribes.

POPULATION: 300 estimated in PHS service area, 1959
212 enrolled tribal members in 1950

CHARACTERISTICS: Blood quantum - 95% fully Indian; 99% one-half or more Indian.

Homes - About one-half of the Indian homes are of clay; the remainder are of many types. Usually 1-2 rooms. Some wickiups and tents.

Education - (Data refer to the entire Pima Service Unit.) One-half of persons aged 25 and older had 7.2 years or more schooling (1950). Most children attend public school, some attend BIA boarding school at Phoenix (grades 7-12).

Livelihood - Average family income low, roughly two-thirds that of the average rural farm family in the State. Source - Farming and stock raising, post and wood cutting, basket work, labor in Phoenix.

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HEALTH
RESOURCES | INDIAN HEALTH FACILITIES: Most general medical patients hospitalized at the Public Health Service Indian Hospital at Phoenix.

Physician and public health nursing services provided on an itinerant basis at Fort McDowell.

Environmental sanitation services provided by sanitarian aide stationed at Salt River Reservation.

FORT (or Camp) McDOWELL RESERVATION, ARIZONA (continued)

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals in Phoenix, 30 miles away, mainly the 335-bed St. Joseph's Hospital, 410-bed Good Samaritan Hospital, 250-bed Memorial Hospital, and 50-bed St. Luke's Hospital. Male tuberculosis patients go to the Oshrin Hospital, Tucson.

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SPECIAL PROBLEMS

HEALTH STATUS: Field staff report many post traumatic accident cases among adults; malnutrition, diarrhea, and respiratory infections among babies.

OTHER: Transition of these people from extremely mobile existence to a restricted reservation life has resulted in many difficult readjustment problems. Lack of employment opportunities on reservation, low economic standards, and poor living conditions intensify health problems.

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FIELD NOTES AND OBSERVATIONS

Pima Health Service Unit

GILA BEND RESERVATION, ARIZONA

LOCATION: Central Arizona, in Maricopa County. Southwest of the Gila River (Pima) Reservation and of Phoenix. Gila River flows westward through this area to join the Colorado River. Federal Highway #80 from Phoenix to Yuma runs close by reservation as do State Highways #84 and #85.

Principal settlements - None as such on reservation. Most Indian families live in a poor community at the outskirts of the non-Indian town of Gila Bend.

Nearest off-reservation towns in Arizona (1950 pop.) - Gila Bend (pop. 580), a few miles from reservation; Casa Grande (pop. 4,181), 59 miles east; Sells (pop. 789), 117 miles southeast; Yuma (pop. 9,145), 118 miles west. Phoenix is 65 miles to the northeast.

THE
RESERVATION

BIA Field Office - Papago Agency, Sells, Arizona

LAND: Over 10,000 acres of tribally owned desert-type land of which two-thirds is open grazing, the remainder sage brush land. Lack of water renders property of little value.

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TRIBE: Papago

POPULATION: 200 estimated in PHS service area, 1959
94 enrolled tribal members in 1950

CHARACTERISTICS: Blood quantum - not known.

Homes - Typical dwelling a 2-room wattled adobe house; 5 persons per dwelling unit (median); at least 2 persons per room.

Education - (Characteristic of the entire Papago.)

One-half of adults aged 25 and older had 4.1 years or less of schooling; 21% of persons aged 45 and older could read and write (1950).

Livelihood - Average family income low. Indians make a poor living as unskilled or seasonal workers at the non-Indian farms nearby. One mining tract under lease.

THE
PEOPLE

HEALTH
RESOURCES

INDIAN HEALTH FACILITIES: General hospital care available at the PHS Indian (Pima) Hospital at Sacaton, and for specialized referral services, the PHS Indian Hospital at Phoenix.

GILA BEND RESERVATION, ARIZONA (continued)

OTHER HEALTH RESOURCES: Public health nursing furnished by Maricopa County.

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SPECIAL PROBLEMS

HEALTH STATUS: Diseases of the respiratory system the main cause of hospitalization at the Public Health Service Indian Hospital, Sacaton, during fiscal year 1958.

OTHER: A small, poverty-stricken Indian community.

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FIELD NOTES AND OBSERVATIONS

GILA RIVER (PIMA) RESERVATION, ARIZONA

THE
RESERVATION

LOCATION: Largest of five reservations roughly encircling Phoenix in Pinal and Maricopa Counties. Extends on both sides of the Gila River which runs from northwest to southeast corners of reservation. Eastern boundary close to railway from Gilbert to Magma. Principal settlements (1950 pop.) - Sacaton (pop. 584), center of government services on reservation; Babchule (pop. 150); Maricopa (pop. 127); Santan (pop. 15); small settlements at Blackwater, Casa Blanca, Gila Crossing, Sacaton Flats, Stotonic. Nearest off-reservation towns in Arizona (1950 pop.) - Casa Grande (pop. 4,181), 15 miles south of Sacaton; Chandler (pop. 3,799), adjoining north central sector of reservation; Coolidge (pop. 4,306) at southeast corner of reservation; Laveen (pop. 300) at northwest corner. City of Phoenix (1957 pop. 172,000), 45 miles north of Sacaton.

BIA Field Office - Pima Agency, Sacaton, Arizona

LAND: Some 372,000 acres, two-thirds tribally owned, remainder trust allotted. Large areas of unproductive desert or dry, open grazing land. Small family farm tracts, many badly fractionated by inheritance. Construction of Coolidge Dam 50 miles away (from which Gila River flows westward) permits some irrigation at reservation. Utilizing this source of water supply, San Carlos (irrigation) Project, authorized by Congress in 1924 but still incomplete, calls for eventual irrigation of 50,000 acres of Indian land. Increasingly, acreage leased to non-Indian farm operators.

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TRIBES: Mostly Pima, some Maricopa.

POPULATION: 5,800 estimated in PHS service area, 1959
5,546 enrolled tribal members in 1950

CHARACTERISTICS: Blood quantum - 95% fully Indian in 1950; 99% one-half or more Indian.

Homes - Typical dwelling a 2-room house of clay or earth; 4.4 persons per dwelling unit (median). Water is obtained from communal wells. PHS just completed 2 new wells at Blackwater and Stotonic (emergency sanitation projects under P. L. 86-121). Waste disposal is unsatisfactory. Homes are small and over-crowded.

Education - (Data refer to the entire Pima Service Unit.) One-half of adults aged 25 and older had 7.2 years or more schooling (1950). Most children now attend school, about half in BIA day schools at Blackwater, Casa Blanca, Gila Crossing, Sacaton, and Santan; one-half in public and mission schools.

Livelihood - Average family income low. Not as low as at Papago and Navajo Reservations, but less than at other reservations in Arizona. About two-thirds that of rural farm families in State. Source - Farming, stock raising, land leases, agricultural and ranch labor, woodcutting.

Tribal income - From farming; sand and gravel permits; land leasing.

THE
PEOPLE

GILA RIVER (PIMA) RESERVATION, ARIZONA (continued)

INDIAN HEALTH FACILITIES: Public Health Service Indian (Pima) Hospital at Sacaton which serves primarily Indians living in Pinal County including the Maricopa Reservation and eastern portion of Gila River Reservation. (Residents of western section of Gila River Reservation go to the PHS Indian Hospital at Phoenix as do all patients who require specialized care.) Patients from northern portion of Papago Reservation represent about 25% of the average inpatient census. In 1960 fiscal year there were -

39 beds available;
1,131 admissions and 219 births in hospital;
27 average daily inpatient load;
13,308 outpatient visits.

HEALTH RESOURCES

Alterations completed providing a new wing for outpatient and field health operations. Dental officer provides preventive, corrective, and educational services at hospital and outpatient clinics.

Medical services on a regularly scheduled basis through clinic nurse working directly with field physician and auxiliary personnel including a sanitarian aide, at Gila Crossing, Casa Blanca, Sacaton, Blackwater, Stoton, and Sacaton Flats. Public health nursing services on a selected basis - health demonstrations, explaining doctor's orders, arranging follow-up. A community worker (health) provides health education services.

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals in Phoenix, 45 miles from Sacaton, mainly the 335-bed St. Joseph's Hospital, 410-bed Good Samaritan Hospital, 250-bed Memorial Hospital, 50-bed St. Luke's Hospital, Crippled Children's (State) Hospital, and the Camelback Sanatorium.

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SPECIAL PROBLEMS

HEALTH STATUS: Respiratory and digestive diseases among the main causes of hospitalization at the PHS Indian Hospital, Sacaton, fiscal year 1958. These were also the notifiable diseases most often reported 1958-1959.

As a part of a PHS research project to determine the effect of a change in the accessibility of drinking water on certain diarrheal disease rates, 80 houses at Sacaton have been equipped with pipes and running water. Indians furnished necessary labor. The Phoenix Field Station, Communicable Disease Center, continues to study infection rates for shigella and salmonella.

OTHER: Land is divided through inheritance so that 10-acre tracts originally allotted to each family are now separated into very small lots. These may lie idle or may be leased, with adjoining tracts, to non-Indian operators. Proceeds from leases, when distributed among individual claimants, rarely suffice to support a family.

Pima Health Service Unit

MARICOPA (AK-CHIN) RESERVATION, ARIZONA

LOCATION: Central Arizona, Pinal County. A small, somewhat L-shaped piece of land, southwest of Phoenix. Separated from Gila River (Pima) Reservation to the north by a few miles of land through which run the Southern Pacific Railway tracks.

Principal settlement - Ak-Chin

Nearest off-reservation towns in Arizona (1950 pop.) - Maricopa (pop. 127) directly to the north; Stanfield (pop. 150), directly south.

BIA Field Office - Pima Agency, Sacaton, Arizona

THE
RESERVATION

LAND: 21,840 acres, tribally owned. Principally dry open grazing land, some farm tracts. One-fourth is in hands of non-Indian operators who hold 10-year improvement leases whereby raw desert lands for which the Indians have no water rights are converted into productive operating units. Non-Indian lessees clear the lands, level them, and drill wells for irrigation purposes; lessees are committed to allow all improvements including deep wells and pumping equipment to revert to the tribe at termination of lease.

* * * * *

TRIBES: Papago, some Pima.

POPULATION: 300 estimated in PHS service area, 1959
139 enrolled tribal members in 1950

THE
PEOPLE

CHARACTERISTICS: Blood quantum - 85% fully Indian in 1950; 96% one-half, or more Indian.

Homes - Often of clay-adobe, but many other types are found. 1-2 rooms; 4-5 persons per dwelling unit. 2-3 persons per room. Education - (Data refer to the entire Pima Service Unit.) One-half of adults aged 25 and older had 7.2 years or more schooling (1950). Most children attend public school; some at mission schools.

Livelihood - Average family income low. Source - Farming, livestock, and wage or migratory seasonal labor.

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HEALTH
RESOURCES

INDIAN HEALTH FACILITIES: Patients go to the Public Health Service Indian (Pima) Hospital at Sacaton.

Medical services on a regularly scheduled basis through clinic nurse working directly with field physician and auxiliary personnel at Ak-Chin. Public health nurse conferences with selected patients (instructions and demonstrations-interpretation of doctor's orders).

MARICOPA (AK-CHIN) RESERVATION, ARIZONA (continued)

SPECIAL PROBLEMS

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals, mainly the 335-bed St. Joseph's Hospital, Phoenix, about 55 miles away.

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HEALTH STATUS: Diseases of the respiratory system were the leading cause of hospitalization at the PHS Indian Hospital, Sacaton, fiscal year 1958; in 1959 ranked second, while obstetrics was first.

OTHER: Tribal representatives particularly interested in environmental sanitation and health education services.

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FIELD NOTES AND OBSERVATIONS

Pima Health Service Unit

SALT RIVER RESERVATION, ARIZONA

LOCATION: Central Arizona, in Maricopa County. A few miles north of Phoenix and of the Gila River (Pima) Reservation. Bounded on south by the Salt River. Extends eastward slightly beyond the junction of the Salt and Verde Rivers. Northern tip of Salt River Reservation forms southern boundary of Fort McDowell Reservation.

Principal settlements - Lehi; Salt River.

Nearest off-reservation towns in Arizona (1950 pop.) - Mesa (pop. 16,790) and Tempe (pop. 7,684); the City of Phoenix (1957 pop. 172,000) all close by and to the south.

THE
RESERVATION

BIA Field Office - Pima Agency, Sacaton, Arizona

LAND: 46,600 acres of which a little less than one-half are tribally owned; remainder are trust allotted and have become badly fractionated by inheritance. Immense areas of unproductive land requiring subjugation. Increasingly, acreage is being leased to non-Indian farm operators who are able to finance irrigation and other improvements. Indians hold gravity flow irrigation rights for almost 10,000 acres and irrigate 4,000 additional acres from deep well pumps.

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TRIBES: Mostly Pima, some Maricopa.

POPULATION: 1,500 estimated in PHS service area, 1959
1,403 enrolled tribal members in 1950

CHARACTERISTICS: Blood quantum - 93% fully Indian in 1950; 98% one-half or more Indian.

Homes - Typical dwelling a 2-room clay or earth home. 4.8 persons per dwelling unit (median); 2 persons per room.

Education - (Data refer to entire Pima Service Unit.) One-half of adults aged 25 and older had 7.2 years or more schooling (1950). 90% of persons aged 6 and older at Salt River read and speak English. Most children attend BIA day school at Salt River.

Livelihood - Average family income low, but slightly above that of other "Pima" groups. About three-fourths the average family income of rural farm families in Arizona. Source - Farming, livestock, some returns from land leases, agricultural and ranch labor.

THE
PEOPLE

SALT RIVER RESERVATION, ARIZONA (continued)

HEALTH RESOURCES

INDIAN HEALTH FACILITIES: The Public Health Service Indian Hospital at Phoenix is the facility ordinarily used by general patients and for care of female tuberculosis patients. Medical care on a regularly scheduled basis through clinic nurse working directly with field physician and auxiliary personnel including a sanitarian aide, at Ak-Chin. Public health nurse conferences with selected patients (instructions and demonstrations-interpretations of doctor's orders).

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals in Phoenix, 10 miles away, mainly the 335-bed St. Joseph's Hospital, the 410-bed Good Samaritan Hospital, 250-bed Memorial Hospital, and 50-bed St. Luke's Hospital. Male tuberculosis patients are hospitalized at Oshrin Hospital, Tucson.

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HEALTH STATUS: Field staff report high accident rate among adults; high infant mortality and morbidity due to respiratory and digestive diseases.

SPECIAL PROBLEMS

OTHER: As at Gila River Reservation, trust allotments of land are too small or too encumbered by heirship rights to be farmed economically. Indians here lack the commercial credit and experience necessary to modern large scale farm operations. Living standards are low.

All health problems are intensified by extreme summer heat, lack of adequate water and lack of refrigeration. The Division of Indian Health, under its sanitation construction activities, extended the Mesa city water system to the Lehi District in 1959. This provides a communal watering point for the community.

San Carlos Health Service Unit

SAN CARLOS RESERVATION, ARIZONA

THE
RESERVATION

LOCATION: Southeast Arizona, close to New Mexico border. Principally in Graham and Gila Counties, small area in Pinal County. Separated on the north from Fort Apache Reservation by the Salt River and the Black River. Bounded by the Gila National Forest on the east, and the Tonto National Forest on the west. Coolidge Dam forms the San Carlos reservoir at southwest corner of reservation.

Principal settlements - Few villages as such; population is very mobile. Indians concentrate at southern end of reservation, roughly in two areas: one around San Carlos with three districts close by -- Gilson Wash, Peridot, and Seven Mile Wash; the other at Blylas.

Nearest off-reservation towns in Arizona (1950 pop.) - Globe (pop. 6,419) is some 17 miles west of San Carlos; Safford (pop. 4,274) about 60 miles to the southeast. The City of Phoenix is about 122 miles to the west.

BIA Field Office - San Carlos Agency, San Carlos, Arizona

LAND: 1,623,000 acres, mostly held in common ownership by the tribe. The northern portion is rough mountain terrain. The southern portion has limited acreage suitable for farming, requires irrigation. Remainder is open grazing land.

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TRIBE: Apache

POPULATION: 4,480 estimated in PHS service area, 1959
3,690 enrolled tribal members in 1950

CHARACTERISTICS: Blood quantum - 98% fully Indian in 1950.

Homes - Typical dwelling a 1-2 room frame house supplemented by a straw and brush covered wickiup. 5 persons per dwelling unit (median). Water supply obtained from dug wells (many have construction defects so that water is unsafe) and drilled wells. More than 10% of households depend upon water hauled over one-half mile. More than 28% of population have no toilet facilities.

Education - One-half of adults aged 25 and older had 6.4 years or more schooling (1950); 84% of persons aged 6 and older read and speak English. 95% of children aged 6-18 in school in 1959, distributed about equally between public and BIA schools; many attend mission schools.

Livelihood - Although this group is among higher income Indian groups in Arizona, the average family earnings were slightly less than three-fourths that for all rural farm families in State (1950). Income of the average Apache family in 1957 was one-third that of surrounding non-Indian families. Source - Cattle sales, wage labor at mines and cotton fields, farming.

THE
PEOPLE

SAN CARLOS RESERVATION, ARIZONA (continued)

INDIAN HEALTH FACILITIES: Public Health Service Indian Hospital at San Carlos, with dental officer in attendance. New hospital authorized. In 1960 fiscal year there were -

35 beds available;
1,486 admissions and 208 births in hospital;
23 average daily inpatient load;
16,408 outpatient visits.

HEALTH RESOURCES

Patients requiring specialized care are referred to the PHS Indian Hospital at Phoenix.

Public Health Service Indian Health Center at Blylas with full-time physician and nursing coverage. Dental care by local private dentists through contract with PHS.

Environmental sanitation services on a reservation-wide basis provided by a sanitarian aide.

A community worker (health) provides health education services.

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals, mainly the 74-bed Gila General Hospital, Globe, 17 miles west of San Carlos, and at the 36-bed Safford Inn Hospital, Safford, 60 miles southeast of San Carlos. These hospitals are used principally for emergency care.

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SPECIAL PROBLEMS

HEALTH STATUS: Influenza and pneumonia and other respiratory diseases, digestive diseases, accidents were among the chief causes of hospitalization in fiscal year 1958. Gastroenteritis, trachoma and pneumonia were the leading notifiable diseases reported 1958-1959. A relatively large number of cases of congenital malformation of the hip found according to special survey, spring 1956.

OTHER: 5% of families depended upon open wells or irrigation ditches for water (1956). Environmental sanitation poor. Under special sanitation facilities legislation (P.L. 86-121) project being planned for water supply protection. An extensive water development project is needed for safe and adequate quantities of water in or near Indian homes.

CALIFORNIA RESERVATIONS AND RANCHERIAS

LOCATION AND LAND: Widely scattered, in parts of some 30 counties, away from coastal strip between San Francisco and Los Angeles. Over 400,000 acres (excluding the 7,900 acres at Fort Yuma Reservation and some 105,000 acres at Hoopa Valley Reservation - pages 33, 37), largely contained in 155 tribally owned holdings: nearly half are less than 161 acres and about one-tenth are in excess of 10,000 acres. Small portion (68,000 acres) is divided into tracts owned as allotments by individual Indians. There are also 466 tracts of public domain land.

Considerable dry grazing land of low capacity, some mountainous and semi-desert land. Almost no income producing minerals or mines. The most barren location is that of Inyo County, east of Fresno (includes Death Valley), where 6% of the population is Indian.

Somewhat favorable conditions at certain locations. Commercial timber contributes to economy at Round Valley Reservation and at Fort Bidwell Reservation, both in northern California, and at Tule River Reservation in south central part of State. Farming is profitable in the fertile valley land between the Sierra Nevada and the Cascade Mountain ranges of north central California to which 11 tribes moved in the 1860's. There are also 10,000 acres of productive farm lands in the mission area, principally in San Diego County where water is diverted from the All-American Canal for purposes of irrigation at Los Coyotes Reservation and other small holdings nearby.

With these exceptions, few of the reservation or rancheria land bases are sufficient to support resident Indian population. Their principal function is that of providing homesites which are occupied permanently by the very young and the very old, but only occasionally by Indian people of wage earning ages. An estimated 95% of the Indians of the region gain a livelihood away from the reservation.

BIA Field Office - Sacramento Area Office, Sacramento, California. Branches: California Agency, Sacramento, California (for the north); Riverside Area Field Office, Riverside, California (for the south).

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TRIBES: In the early 19th Century, well over 100 tribes and bands with a total population of more than 100,000 Indians lived in California. Many have since moved eastward or have been assimilated into the general population and have even ceased to be enumerated as Indians. In 1950, the United States Census enumerated approximately 20,000 Indians widely scattered in California. About 6,300 live on or near the reservations and

THE
PEOPLE

CALIFORNIA RESERVATIONS AND RANCHERIAS (continued)

rancherias (exclusive of approximately 900 at the Fort Yuma Reservation and 1,800 at Hoopa Valley Reservation).

CHARACTERISTICS: Indians living in California today for the most part -

- Are of varying degrees of Indian heritage, with an extreme minority fully Indian;
- Live in frame houses of about 4 rooms, usually in bad repair, either on homesites on reserved land or on the outskirts of towns;
- Speak and read English although preschool children and their grandparents may converse in Indian language when at home;
- Complete at least 8 years of schooling, in public schools (only BIA school in California is the Sherman Institute at Riverside, now operated as a boarding school for Navajo);
- Have, on the average, a relatively low family income from migratory agricultural work, unskilled labor in metropolitan centers, or jobs at ranches and forests.

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HEALTH RESOURCES

There has been a gradual reduction of direct Federal services to Indians in the State of California. Public health services of California State and local health departments are now extended to Indians as to all other citizens, as are services of State and county welfare departments. By July 1958, the last of the DIH arrangements for financing medical care through contracts with State and county agencies had been terminated.

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HEALTH STATUS: Heart diseases and accidents are leading causes of death (1957). Respiratory diseases (mainly influenza and pneumonia) rank third.

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FIELD NOTES AND OBSERVATIONS

Hoopa Valley Health Service Unit

HOOPA VALLEY RESERVATION, CALIFORNIA and fringe area including the KLAMATH STRIP

THE RESERVATION

LOCATION: Northwest corner of California, close to Pacific coast. Hoopa Valley Reservation is less than 25 miles east of Trinidad and 60 miles south of Oregon border. Hoopa Extension (Klamath Strip) extends from northern boundary of the Hoopa Reservation, one mile on each side of the Klamath River, to 20 miles from the river mouth. Generally the area includes Del Norte and Humboldt Counties.

Principal settlement - Hoopa.

Nearest off-reservation towns in California (1950 pop.) - Eureka (pop. 23,058) is 60 miles southwest of Hoopa over steep mountain roads. Blue Lake (pop. 824), 45 miles from Hoopa along same road. Crescent City (pop. 2,136) is 20 miles north of coastal end of Klamath Strip.

BIA Field Office - Hoopa Area Field Office, Hoopa, California

LAND: Hoopa Valley Reservation (12 miles square) was established 1864-6, Klamath Strip in 1891. Two properties consist of almost 105,000 acres of prime timberland, some grazing tracts. Indians also granted grazing permits on adjacent National Forest range lands. A few home gardens along the Klamath River.

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TRIBES: Hoopa, with some Karok and Yurok at Hoopa Valley Reservation
Yurok at Klamath Strip.

POPULATION: 1,800 estimated in PHS service area, 1959

CHARACTERISTICS: Blood quantum - 21% fully Indian in 1950; 79% one-half or more Indian.

Homes - Typical dwelling a 4-room frame house. 3.9 persons per dwelling unit (median). Most homes have water under pressure either inside or from yard hydrants, but 12% of families haul water. 63½% of homes have privies. Household wastes are disposed of in a community sanitary landfill.

Education - Half of adults aged 25 and older had 8 or more years of schooling (1950); 90% of persons aged 6 and older speak English. Children attend public schools. Tribe has voted scholarship fund to develop leaders in forestry and in business administration.

Livelihood - Average family income only slightly below that for all rural farm families in State but high compared with that of other California Indians. Economy strongly dependent upon timber. Source - Logging, mill, and timber work, sawmill labor; livestock and a few small dairies.

THE PEOPLE

HOOPA VALLEY RESERVATION, CALIFORNIA
and fringe area including the KLAMATH STRIP (continued)

Tribal income from sale of 35 million board feet of timber annually on sustained yield basis. Per capita payments have been approximately \$500 per year.

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FACILITIES and SERVICES: The original Indian hospital at Hoopa Valley, constructed in 1917, contained 24 beds. An addition for tuberculous patients was completed in 1929, bringing the capacity up to 36 beds. In 1936, the hospital was replaced with a new facility, and reported beds available ranged from 36 to 40.

Following the transfer of the Indian health program to the Public Health Service, the hospital's operating beds were reduced, along with rearrangement of space. In more recent years, 20 beds have been reported available. Changes in hospital utilization and availability of other resources resulted in a reduced inpatient census. Outpatient services, however, increased steadily and for fiscal year 1959 the number of visits reached almost 5,500.

During 1960, a new community hospital (Klamath-Trinity) was placed under construction at Hoopa, with the aid of Hill-Burton funds and supported by Indian health funds under the authority of P.L. 85-151. The very low utilization of the PHS Indian hospital, the increasing difficulty in staffing, and the pending availability of the community facility led to planning for a modification in the health program for Indian beneficiaries of the Hoopa Health Service Unit and conversion of the hospital operation.* A social worker assigned to the hospital is working with the Indian beneficiaries and the Humboldt County Welfare Department in planning for provision of medical services through the use of local resources. The Klamath-Trinity Hospital and Community Clinic is the primary resource.

Public health services of California State and local health departments are extended to Indians as to all other citizens. At Hoopa, preventive health services are provided by the Humboldt-Del Norte Health Department

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SPECIAL
PROBLEMS

HEALTH STATUS: Respiratory diseases (mainly influenza and pneumonia), disorders of the digestive system, and accidents among leading causes of hospitalization in fiscal year 1958. Pneumonia and measles were the notifiable diseases most often reported over the 2-year period 1958-1959.

HOOPA VALLEY RESERVATION, CALIFORNIA
and fringe area including the KLAMATH STRIP (continued)

OTHER: Insufficient farm land in the valley to support an agricultural economy for all members of the tribe.

High accident rate among persons employed at the mills, in the woods, and on the highways.

Exploratory work involving the drilling of domestic wells is proceeding at Hoopa. The schedule here is progressing at a somewhat slower rate than originally anticipated because of difficulty with drilling equipment.

*As of December 21, 1960, converted from a direct hospital to a community-based operation.

Yuma Health Service Unit

FORT YUMA RESERVATION, CALIFORNIA
and COCOPAH RESERVATION, ARIZONA

LOCATION: Southeastern tip of California. Fort Yuma Reservation is in Imperial County south of Laguna Dam, between the All-American Canal and the Colorado River. Directly across State line from Yuma, Arizona. Cocopah Reservation, less than 20 miles away, sets almost at southwest tip of Arizona, in Yuma County.

Principal settlements - No Indian communities on these reservations. Winterhaven, a non-Indian townsite surrounded by Indian allotments of the Fort Yuma Reservation, serves as an Indian trade center. Cocopah Reservation has two sectors, the Eastern Reserve, and the Western Reserve where a majority of Indian homes are located.

Nearest off-reservation towns (1950 pop.) - Yuma, Arizona (pop. 9,145) is 2 miles south of Winterhaven, California, and 14 miles north of the Western Reserve of Cocopah Reservation. Gadsden, Arizona (pop. 350) is on the Yuma Valley Railroad, south of Cocopah Reservation.

BIA Field Office - Colorado River Agency, Parker, Arizona

LAND: Fort Yuma Reservation - 7,900 acres, mostly level and irrigable, entirely in the floodplain of the Colorado River. Once broken by river channels, sand dunes, and outwashes from hills to the north, the terrain is now leveled by years of farming. Approximately 5,100 acres of productive land leased to non-Indian farmers for growing cotton, alfalfa, sorghum, flax, castor beans, barley, wheat, Sudan grass, lettuce, and watermelon. Remainder utilized for family garden tracts and homesites. Cocopah Reservation - 528 acres of which 390 are irrigable. Reserved for the Cocopahs in 1938, but status of the area as a full-fledged reservation is still somewhat in doubt.

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TRIBES: Yuma (or Quechan), at Fort Yuma Reservation, California; Cocopah, at Cocopah Reservation, Arizona.

POPULATION: 1,000 estimated in PHS service area, 1959
900 Yuma
100 Cocopah
1,209 enrolled tribal members in 1956

THE
PEOPLE

CHARACTERISTICS: Blood quantum - 70% of Yuman stock were fully Indian in 1930. Blood quantum of Cocopah Indians not known; presumably majority are fully Indian.

Homes - Typical dwelling at both reservations a 2-4 room house of willow framework plastered with adobe; board roof covered with brush and mud. In 1955 Congress appropriated funds for better housing of California Indians. As a result, 70 surplus war housing units were brought to Fort Yuma Reservation and given to Indian residents. Still it was reported only 29% of families had inside plumbing in 1957 and that only one-half of the privies used were in satisfactory condition. Over 58% of families use wood and kerosene for cooking food.

FORT YUMA RESERVATION, CALIFORNIA
and COCOPAH RESERVATION, ARIZONA (continued)

Education - Most children attend nearby public schools. Most adults at Fort Yuma Reservation had some grade schooling, read and speak English. Little known about status at Cocopah Reservation.

Livelihood - Median family income of Fort Yuma Indians relatively high in comparison with that of other Indian groups in Phoenix Area; that of Cocopah group is low. Source - Seasonal agricultural labor in the Imperial Valley and on fields leased to non-Indians; employment on Southern Pacific Railroad; manual labor in and around Yuma.

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INDIAN HEALTH FACILITIES: Public Health Service Indian (Fort Yuma) Hospital at Winterhaven. In 1960 fiscal year there were -

14 beds available;
426 admissions and 36 births in hospital;
8 average daily inpatient load;
5,712 outpatient visits.

Local private physicians in Yuma, through contract with PHS, treat Indians at this hospital or its outpatient clinic. Specialized services on a referral basis at PHS Indian Hospital, Phoenix.

Well baby clinic held at San Pasqual School, Winterhaven, by physician and registered nurse from PHS Indian Hospital, Winterhaven.

Environmental sanitation services provided by a sanitarian aide stationed at Yuma.

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals, mainly the 100-bed Yuma County General Hospital, Yuma, Arizona, 2 miles from Winterhaven.

Dental care by local private dentists, through contract with PHS.

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HEALTH STATUS: Diseases of the digestive system, influenza and pneumonia, and accidents were among the principal causes of hospital admission in fiscal year 1958. Chickenpox and pneumonia were the notifiable diseases most often reported over the 2-year period 1958-1959.

OTHER: The Cocopah are a mobile group, wives and children accompanying husbands in search of seasonal work. They intermingle freely with the Cocopah Indians in Mexico. Resident population at this small reservation shows extreme fluctuation. Need for improvement of sanitation here.

At Fort Yuma Reservation sloughs, irrigation canals and ditches permit mosquito breeding.

Climate among the warmest in the United States. There is a low average rainfall of about 3.5 inches per year.

HEALTH
RESOURCES

SPECIAL
PROBLEMS

Duck Valley Health Service Unit

DUCK VALLEY (Western Shoshone) RESERVATION, NEVADA

LOCATION: Northeast Nevada, in Elko County, at northwestern edge of Humboldt National Forest. A small corner of reservation extends over State line into Owyhee County, Idaho.

Principal settlements - Owyhee, Nevada (1950 pop. 100), at junction of the three roads running through reservation is the center of government activities and of Indian trade.

Nearest off-reservation towns (1950 pop.) - Mountain Home, Idaho (pop. 4,102), 100 miles to the north of Owyhee; Elko, Nevada (pop. 5,393), 95 miles to south. Mountain City, Nevada (pop. 125), 13 miles southeast of Owyhee in Humboldt National Forest.

THE RESERVATION

BIA Field Office - Nevada Agency, Stewart, Nevada

LAND: Almost 290,000 acres of tribally owned land, approximately equal parts in Nevada and Idaho. Small tracts of farm and woodland irrigated by mountain streams, but most of the land is open grazing land covered with sage brush and some barren and waste land.

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TRIBES: Paiute and Shoshone.

POPULATION: 1,000 estimated in PHS service area, 1959
- 800 in Nevada
- 200 in Idaho
966 enrolled tribal members in 1950

CHARACTERISTICS: Blood quantum - 48% fully Indian in 1950; 94% one-half or more Indian.

Homes - Typical dwelling a 2-room frame house. 4 persons per dwelling unit (median). It was reported in 1958 that only 25% of homes have safe domestic water source; more than 12% of families use water from untreated surface sources. The privy is the principal means of disposing of human wastes; most are constructed unsatisfactorily.

Education - 2 of 3 persons aged 45 years and older read and speak English. Education minded. School attendance good, mostly at public school.

Livelihood - Average family income low, less than three-fourths that of the rural farm families in Idaho and Nevada.

Source - Cattle and ranch labor. Tribally owned land is assigned for family use as grazing land, for forage crops or raising of grain.

THE PEOPLE

DUCK VALLEY (Western Shoshone) RESERVATION, NEVADA
(continued)

INDIAN HEALTH FACILITIES: Public Health Service Indian (Western Shoshone) Hospital at Owyhee. In 1960 fiscal year there were -

20 beds available;
392 admissions and 42 births in hospital;
11 average daily inpatient load;
6,412 outpatient visits.

HEALTH
RESOURCES

Dental officer stationed here; attends hospital patients and conducts field clinics at nearby reservations. Dental assistant training for high school girls conducted at this hospital in conjunction with State Board of Education; high school credit given for course.

Environmental sanitation services provided by a sanitarian aide stationed at Owyhee.

OTHER HEALTH RESOURCES: Public health services for Indians same as to other citizens of the State; available to Indian beneficiaries through Public Health Service contract with Nevada State Department of Health.

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HEALTH STATUS: Diseases of the digestive and respiratory systems were among the principal causes of hospitalization during fiscal year 1959. Measles, mumps, and streptococcal sore throat were the notifiable diseases most often reported 1958-1959.

SPECIAL
PROBLEMS

OTHER: Extreme isolation, poor soil, and lack of water result in many hardships. There is need to accelerate range and soil conservation programs. Grazing land has considerable sage brush; considerable capital required to expand ranch economy. Reservoir and water storage needed for irrigation. Domestic water supply could be made safe by improved sanitation and repair of existing wells.

Tribal Council has appropriated \$3,000 for drilling new wells for domestic use and for improving and protecting existing wells. The Council has also requested assistance from Area Sanitation Branch in obtaining pipe and casing to expedite the program.

TE-MOAK RESERVATION, RUBY VALLEY RESERVATION
BATTLE MOUNTAIN COLONY, and ELKO COLONY, NEVADA

LOCATION and LAND (1950 pop.): Four sites in trade area of Elko, northwest Nevada, extremely isolated. Mountain peaks reach 11,000 feet. Road winds around foothills and downward into valley - 110 miles east from Elko to Wendover, Utah (pop. 776), and 126 miles west from Elko to Winnemucca, Nevada (pop. 2,847).

Te-Moak Reservation, west of Ruby Mountain Range, largest of the four; consists mostly of grazing and farm land along Franklin River between Franklin Lake and Ruby Lake. Ruby Valley Reservation, smaller, on eastern slope of mountains, has grazing and forage crop lands adjacent to Humboldt National Forest.

Battle Mountain Colony and Elko Colony are on outskirts of towns by same name. Most land at Battle Mountain Colony barren sage brush. Indian homes also dot slum areas of towns along railroad tracks that course Humboldt River Valley: Beowawe (pop. 60), Carlin (pop. 1,203), Palisade (pop. 40), and Wells (pop. 947).

THE
RESERVATION

	<u>Acreage</u>	<u>County</u>	<u>Distance from nearest off-reservation town in Nevada</u>
Te-Moak (So. Fork Purchase) Res.	13,050	Elko	25 miles south of Elko
Ruby Valley Res.	1,240	Elko	65 miles S.E. of Elko
Battle Mountain Colony	680	Lander	Battle Mountain (pop. 735)
Elko Colony	193	Elko	Near Elko (pop. 5,393)

BIA Field Office - Nevada Agency, Stewart, Nevada

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TRIBES: Shoshone; Te-Moak at Ruby Valley and at Te-Moak.

THE
PEOPLE

	<u>POPULATION:</u>	<u>Estimated in PHS service area, 1959</u>
	Te-Moak Reservation	150
	Ruby Valley Reservation	100
	Battle Mountain Colony	200
	Elko Colony	150

TE-MOAK RESERVATION, RUBY VALLEY RESERVATION,
BATTLE MOUNTAIN COLONY, and ELKO COLONY, NEVADA
(continued)

CHARACTERISTICS: Blood quantum - Varies greatly. 93% fully Indian at Battle Mountain; 48% fully Indian at Elko Colony. Homes - Typical dwelling a small frame house in poor repair. Education - One-half of adult Indians aged 25 years and older in Nevada had 6 years or more schooling (1950). Most Nevada Indian children in public school. Livelihood - Average family income low. Source - Reservation families depend on cattle, forage crops, and seasonal jobs at ranch and agricultural work; Indians living at outskirts of communities depend on seasonal wage labor.

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HEALTH RESOURCES: Public Health Service contracts with Nevada State Department of Health for public health services to Indians. The services are the same as those available to other citizens of the State.

HEALTH
RESOURCES

Medical care by local private physicians and surgeons of the Elko Clinic, through contract with the Public Health Service; monthly clinic at Elko with public health nurse and clerk in attendance. Services of ophthalmologist through arrangement with PHS.

Hospital care at Federal expense may be authorized at community hospitals, mainly the 44-bed Elko General Hospital, Elko, with physicians of the Elko Clinic in attendance.

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HEALTH STATUS: Heart disease the leading cause of death among Nevada Indians over the 3-year period 1956-1958.

SPECIAL
PROBLEMS

OTHER: Men follow seasonal agricultural and wage work in Nevada, California and Utah; wives often accompany them. The aged, infirm, and children form a large part of the stationary population.

Unprotected water supplies at rural locations. In 1957 Congress appropriated funds under Public Law 85-137 to extend water and sewer lines from the City of Elko to the Elko Indian Colony. This construction was supervised by the Division of Indian Health.

Fort McDermitt - Winnemucca Health Service Unit
FORT McDERRIMM RESERVATION, SUMMIT LAKE RESERVATION and
WINNEMUCCA COLONY, NEVADA

LOCATION and LAND (1950 pop.): Rectangle fitting northwest corner of Nevada would encompass three Indian holdings about 50 miles apart. Great contrasts in contour and climate include an occasional mountain peak 8,000 feet high; Black Rock Desert between Summit Lake and Winnemucca; High Rock Canyon, west of Summit Lake; Toiyabe National Forest, directly east of Fort McDermitt.

Fort McDermitt Reservation (extends into Oregon) has large grazing area, some farm and timber lands. National Forest used for summer grazing, by community permit. Indians concentrate at settlement named McDermitt (pop. 250).

Summit Lake Reservation on mountainous terrain; open grazing lands and fishing streams. Reached by unimproved roads, but is so cut off by canyons and desert that only six families reside here permanently.

Winnemucca Colony, a small Indian homesite community on outskirts of Winnemucca (pop. 2,847). U. S. Highway #95 connects Winnemucca and McDermitt. U. S. Highway #40 and a railway run 167 miles southwest from Winnemucca to Reno (pop. 32,497).

THE
RESERVATION

	Acreage	County and State	Distance from nearest off-reservation town in Nevada
Fort McDermitt Reservation	16,500 18,300	Humboldt, Nev. Malheur, Oreg.	50 miles north of Winnemucca
Summit Lake Res.	10,000	Humboldt, Nev.	--
Winnemucca Colony	340	Humboldt, Nev.	Near Winnemucca

BIA Field Office - Nevada Agency, Stewart, Nevada

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TRIBES: Paiute, some Shoshone

THE
PEOPLE

POPULATION:

Estimated in PHS service area, 1959

Fort McDermitt Reservation	300
Summit Lake Reservation	50
Winnemucca Colony	50

FORT McDERMITT RESERVATION, SUMMIT LAKE RESERVATION, and
WINNEMUCCA COLONY, NEVADA (continued)

CHARACTERISTICS: Blood quantum - No specific information, but majority are at least one-half or more Indian.

Homes - Typical dwelling a 2-room box house; overcrowded and poorly constructed. Because of the use of unsafe water in the past, the Division of Indian Health is constructing 19 new domestic water wells and will deepen and repair 19 additional domestic water wells under the sanitation construction authority.

Education - One-half of Indians aged 25 years and older in Nevada had 6 years or more schooling (1950). Most children attend public schools.

Livelihood - Average family income low. At Fort McDermitt and Summit Lake Reservations, source of income is cattle, forage crops, off-reservation ranch work. At Winnemucca Colony Indians rely on seasonal jobs.

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INDIAN HEALTH FACILITIES: Regularly scheduled medical care by local private physician through contract with the Public Health Service, assisted by public health nurse, at McDermitt.

Environmental sanitation program by sanitarian aide stationed at Owyhee.

HEALTH
RESOURCES

OTHER HEALTH RESOURCES: Public health services for Indians (same as available for other citizens of the State) through Public Health Service contract with Nevada State Department of Health. Medical care by local private physician through contract with PHS, at Winnemucca. Hospital care may be authorized at Federal expense at community hospitals, mainly the 60-bed Humboldt County General Hospital, Winnemucca (near Winnemucca Colony but 50 miles from Fort McDermitt Reservation).

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SPECIAL
PROBLEMS

HEALTH STATUS: Heart disease the leading cause of death among Nevada Indians over the 3-year period 1956-1958, with accidents the second cause of death. Infectious diseases most frequently reported.

OTHER: Range lands at Summit Lake Reservation are very poor. Inadequate water and sewage disposal at all three locations.

Moapa Health Service Unit

MOAPA RESERVATION and LAS VEGAS COLONY, NEVADA

LOCATION and LAND (1950 pop.): Southwest corner Nevada, near Las Vegas Bombing and Gunnery Range. Moapa Reservation close to junction of U. S. Highways #93 and #91 which converge at small town of Moapa then continue 40 miles southwest to Las Vegas. Indian homesites at Las Vegas Colony within the city limits of Las Vegas. Less mountainous and less desert-like than other Nevada reservations, but two-thirds of land at Moapa Reservation is unproductive; remainder leased for non-Indian operation. Here and at Las Vegas Colony some irrigated tracts used for family gardens.

THE
RESERVATION

	<u>Acreage</u>	<u>County</u>	<u>Distance from nearest off-reservation town in Nevada</u>
Moapa Reservation	1,128	Clark	near Moapa (pop. 20)
Las Vegas Colony	10	Clark	within city limits of Las Vegas (pop. 24,624)

BIA Field Office - Nevada Agency, Stewart, Nevada

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TRIBE: Paiute

POPULATION:

Estimated in PHS
service area, 1959

THE
PEOPLE

Moapa Reservation	150
Las Vegas Colony	100
-- migratory	100

CHARACTERISTICS: Blood quantum - No specific information, but majority are at least one-half or more Indian.
Homes - Typical dwelling a shack made from packing crates.
Old people at Moapa live in brush huts.
Education - One-half of adult Indians aged 25 years and older in Nevada had 6 years or more schooling (1950). Most Nevada Indian children attend public school.
Livelihood - Earnings low, as migratory agricultural and seasonal laborers. Paiute follow the harvests from southern Nevada through Utah. Moapa group has tribal income from sale of hay and lease of land.

MOAPA RESERVATION and LAS VEGAS COLONY, NEVADA (cont'd)

HEALTH RESOURCES

INDIAN HEALTH FACILITIES: A few Indians from Clark County are referred to the Public Health Service Indian Hospital at Schurz.

OTHER HEALTH RESOURCES: Public health services for Indians (same as available for other citizens of the State) through PHS contract with Nevada State Department of Health.

Dental care by local private dentist through contract with the Public Health Service.

Hospital care at Federal expense may be authorized at community hospitals, mainly the 202-bed Southern Nevada Memorial Hospital, Las Vegas, near the Las Vegas Colony but 40 miles from Moapa Reservation.

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SPECIAL PROBLEMS

HEALTH STATUS: Heart disease the leading cause of death among Nevada Indians over the 3-year period 1956-1958.

OTHER: These Indian settlements are not served by community water systems or sewerage facilities.

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FIELD NOTES AND OBSERVATIONS

Pyramid Lake Health Service Unit

PYRAMID LAKE RESERVATION, CARSON COLONY, LOVELOCK COLONY, and RENO-SPARKS COLONY, NEVADA

LOCATION and LAND (1950 pop.): Pyramid Lake Reservation and three small Indian colonies are in west central Nevada, almost at California State line. Each of the colonies bears name of nearby non-Indian community in whose outskirts Indians live.

Pyramid Lake is a scenic landmark. Some irrigated farm, homesite, and timber lands at lower end of lake where tiny Indian villages of Pyramid, Sutcliffe, Anahol, Nixon, and Numaha dot its shores. Northern portion of reservation is barren with sparse forage growing only a few weeks each year. Deserts lie to east and to north.

THE
RESERVATION

	<u>Acreage</u>	<u>County</u>	<u>Distance from nearest off-reservation town in Nevada</u>
Pyramid Lake Reservation	475,000	Washoe	About 30 miles north of Reno
Carson Colony	160	Ormsby	Near Carson (pop. 3,082)
Lovelock Colony	20	Pershing	Near Lovelock (pop. 1,604)
Reno-Sparks Colony	28	Washoe	Near Reno (pop. 32,497)

BIA Field Office - Nevada Agency, Stewart, Nevada

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TRIBES: Washoe; Paiute at Lovelock Colony.

POPULATION:

Estimated in PHS
service area, 1959

Pyramid Lake Reservation	850
Carson Colony	100
Lovelock Colony	150
Reno-Sparks Colony	200

THE
PEOPLE

CHARACTERISTICS: Blood quantum - At Pyramid Lake, 95.7% fully Indian in 1950; 99% one-half or more Indian. Others, no specific information, but majority are at least one-half or more Indian.

Homes - Typical dwelling a 2-room frame shack in bad repair; crowded. At Pyramid Lake Reservation, 4.9 persons per dwelling unit (median). About 2 persons per room (median).

Education - 89% of adults aged 25 and older read and speak English at Pyramid Lake Reservation; Tribal Council here gives loans to students for education (from revolving fund). One-half

PYRAMID LAKE RESERVATION, CARSON COLONY, LOVELOCK COLONY, and RENO-SPARKS COLONY, NEVADA (cont'd)

of adult Indians aged 25 years and older in Nevada had 6 years or more schooling (1950). Majority of Nevada Indian children attend public school.

Livelihood - Average family income low. Source - At Pyramid Lake Reservation, seasonal agricultural employment; beef cattle; family farm tracts. Other groups depend upon seasonal jobs at agriculture, ranches, mines, and railroads.

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INDIAN HEALTH FACILITIES: Physician and public health nursing services provided on an itinerant basis at Nixon on the Pyramid Lake Reservation through the Public Health Service Indian Hospital at Schurz to which Indians may also be referred. Schurz is some 85 miles from Nixon.

Sanitary engineer is stationed at Reno to provide technical consultive services and to be project engineer on Division of Indian Health sanitation facilities construction activities in northern Nevada.

HEALTH
RESOURCES

OTHER HEALTH RESOURCES: Public health services for Indians through PHS contract with Nevada State Department of Health.

Medical care to Indians in vicinity of Stewart and Carson City by local private physician through contract with PHS.

Hospital care at Federal expense may be authorized at community hospitals, mainly the 34-bed Carson Tahoe Hospital, Carson City; also at the 271-bed Washoe Medical Center in Reno. Reno is 95 miles from Lovelock but within 30 miles of the other Colonies and 45 miles from the southern portion of the Pyramid Lake Reservation where most of the Indians reside.

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SPECIAL
PROBLEMS

HEALTH STATUS: Diseases of the heart the leading cause of death among Nevada Indians over the 3-year period 1956-1958.

OTHER: Unprotected water supply from wells and springs in rural locations. Inadequate sewage disposal. At the three Colonies there is need for additional outlets and connections to existing water systems.

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**WALKER RIVER RESERVATION, FALON RESERVATION and COLONY,
WASHOE RESERVATION and ALLOTMENTS, DRESSLERVILLE
COLONY, YERINGTON RESERVATION and COLONY,
and YOMBA RESERVATION, NEVADA**

LOCATION and LAND (1950 pop.): West central Nevada, south and east of Carson City (pop. 3,082). Land holdings of two groups are well identified: Walker River Reservation, the largest, and Yomba Reservation, the most isolated. Six smaller Indian properties form semi-circle within 50-mile radius to north and west of Walker River Reservation.

Walker River Reservation extends along eastern watershed of Walker River as far as Walker Lake; cuts into Toiyabe National Forest on three sides. Mostly sage brush with some irrigated grazing and alfalfa crop acreage, timber tracts along the river, and sodium deposits. Main settlement at this reservation is Schurz (pop. 400). Yomba Reservation, farther east and along Reese River, is principal Nevada home of Shoshone Tribe who are granted grazing rights in adjoining forests because of insufficient land. One settlement at Yomba Reservation, Lee (pop. 85).

**THE
RESERVATION**

At Fallon Reservation and Colony, Dresslerville Colony, Yerington Reservation and Colony, Indian homes cluster close to non-Indian towns. Many families have limited land for forage crops, alfalfa, wheat, hay, and barley; they often own a few cattle and sheep. Washoe Reservation covers considerable acreage, but allotments are difficult to delineate because non-Indians use most of the range country for cattle grazing.

	<u>Acreage</u>	<u>County</u>	<u>Distance from nearest off-reservation town in Nevada</u>
Walker River Res.	320,430	Churchill Lyon Mineral	Yerington (pop. 1,157) 25 miles west of Schurz
Fallon Reservation Fallon Colony	6,600 40	Churchill Churchill	Near Fallon (pop. 2,400)
Washoe Reservation and Allotments Dresslerville	65,526 40	Douglas Douglas	5 miles south of Gardner- ville (pop. 569) Adjoins Washoe Allotments
Yerington Reservation Yerington Colony	1,156 9	Lyon Lyon	Yerington (pop. 1,157)
Yomba Reservation	4,681	Nye	Austin (pop. 520) 20 miles north

BIA Field Office - Nevada Agency, Stewart, Nevada

WALKER RIVER RESERVATION, NEVADA, and ADJACENT
RESERVATIONS and COLONIES (continued)

TRIBES: Paiute and some Shoshone; Washoe at Washoe Reservation

POPULATION: Estimated in PHS
service area, 1959

Walker River Reservation	700
Fallon Reservation & Colony	200
Yerington Reservation & Colony	200
Yomba Reservation	200
Washoe-Dresslerville	300

CHARACTERISTICS: Blood quantum - At Walker River 68% fully Indian, 1950; 93% one-half or more Indian. Others, at least one-half Indian.

THE
PEOPLE

Homes - Typical dwelling a 2-room frame house; 3 persons per unit (median). One-half the houses at Washoe are of brick; at Yomba Reservation, some pumice-brick and cinder block homes. Education - At Walker River 84% of persons aged 25 and older read and speak English. One-half of Nevada Indians 25 years or older had 6 years or more schooling (1950). Children attend public schools.

Livelihood - Average family income low. Source - Cattle, subsistence gardens, forage crops, seasonal labor. Some at Yerington employed by Anaconda Copper Co., others on Naval Ordnance plant and construction project.

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INDIAN HEALTH FACILITIES: Public Health Service Indian (Walker River) Hospital at Schurz. In 1960 fiscal year there were -

20 beds available;
535 admissions and 78 births in hospital;
13 average daily inpatient load;
4,172 outpatient visits.

HEALTH
RESOURCES

Physician and public health nursing services provided on Itinerant basis at Dresslerville; limited services at Yomba.

Medical social worker stationed at Schurz Hospital.

OTHER HEALTH RESOURCES: Public health services through PHS contract with Nevada State Department of Health.

Hospital care at Federal expense may be authorized at community hospitals, mainly the 271-bed Washoe Medical Center, Reno, about 90 miles from Schurz and at the Churchill County Hospital, Fallon.

Dental care for children, and for adults in emergencies, by local private dentist through contract with PHS.

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SPECIAL
PROBLEMS

HEALTH STATUS: Respiratory and digestive system diseases chief causes of hospitalization and leading notifiable diseases; accidents.

OTHER: Domestic water taken from irrigation ditches, water holes, and unprotected wells. Sewage disposal unsatisfactory.

GOSHUTE RESERVATION, GANDY HOMESTEAD, ELY COLONY, and
DUCKWATER RESERVATION, NEVADA and UTAH

LOCATION and LAND (1950 pop.): Goshute Reservation, largest of four Indian holdings in east central Nevada and west central Utah, lies close to southern end of great Salt Lake Desert. Open grazing land with valley farm and timber tracts. Extends into remote, isolated portions of both States. Indian settlement on reservation, also named Goshute.

Gandy Homestead, Utah, 30 miles south of Goshute, is a small Indian holding. Few residents.

Ely Colony touches outskirts of non-Indian town Ely, Nevada. About 90 miles south of Goshute from which it is separated by the Shell Mountain Range whose summit peak reaches 11,890 feet. Close to largest copper pit in the country.

Duckwater Reservation, 60 miles farther southwest, has open grazing lands that edge up to the Nevada National Forest. On a high plateau; distant mountain tops visible in all directions. Currant, Nevada, the closest non-Indian town.

THE
RESERVATION

	<u>Acreage</u>	<u>County and State</u>	<u>Distance from nearest off-reservation town in Nevada</u>
Goshute Reservation	70,000	White Pine, Nevada	90 miles northeast of Ely (pop. 3,558)
	39,000	Juab, Utah	
Gandy Homestead	160	Millard, Utah	60 miles northeast of Ely
Ely Colony	10	White Pine, Nevada	Near Ely
Duckwater Reservation	3,643	Nye, Nevada	15 miles northwest of Currant (pop. 25)

BIA Field Office - Nevada Agency, Stewart, Nevada

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TRIBES: Shoshone, Paiute at Gandy

THE
PEOPLE

<u>POPULATION:</u>	<u>Estimated in PHS service area, 1959</u>
Goshute Reservation	200
Gandy Reservation	-
Ely Colony	150
Duckwater Reservation	200

GOSHUTE RESERVATION, GANDY HOMESTEAD, ELY COLONY,
and DUCKWATER RESERVATION, NEVADA and UTAH (continued)

CHARACTERISTICS: Blood quantum - Mostly one-half or more Indian.
Homes - Typical dwelling at Duckwater Reservation a brick or cinder block house; at other places, a 2-room frame hut in bad repair.

Education - One-half of adult Indians aged 25 years and older in Nevada had 6 years or more schooling (1950). Majority of Indian children in the State attend public school. BIA day school at Goshute.

Livelihood - Average family income low. Source - Cattle, small grain and forage crops, wildlife, seasonal agricultural labor. At Ely Colony most families depend upon wage labor, usually seasonal.

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INDIAN HEALTH FACILITIES: Monthly clinics conducted at Duckwater Reservation and Goshute Reservation by physicians from Ely, through contract with Public Health Service; public health nurse in attendance. Some Indians from this unit go to the PHS Indian Hospital at Owyhee, Nevada.

HEALTH
RESOURCES

OTHER HEALTH RESOURCES: Public health services for Indians through PHS contract with Nevada State Department of Health.

Hospital care at Federal expense may be authorized at community hospitals, mainly the White Pine County General Hospital at Ely, Nevada, near Ely Colony but 90 miles from Goshute. Medical and dental services to Indian patients at this hospital by local private physician and dentist, through contract with PHS.

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HEALTH STATUS: Infectious diseases and accidents frequently reported.

SPECIAL
PROBLEMS

OTHER: These groups of Indians are extremely isolated. Most adults still follow the migratory pattern of their ancestors, finding seasonal agricultural work where available in Nevada and Utah. Home communities are composed largely of children, the aged and infirm.

Except for Ely Colony where city water is available, water drawn from unprotected wells or irrigation ditches. No safe means of garbage disposal.

SKULL VALLEY RESERVATION, UTAH

THE
RESERVATION

LOCATION: Northwest Utah, Tooele County. South of Great Salt Lake and of Salt Lake City. Western boundary is separated from Great Salt Lake Desert by the Cedar Mountains. Western boundary touches Wasatch National Forest. **Principal settlements** - None. Only one family lives on reservation. Remainder live at non-Indian town of Grantsville. **Nearest off-reservation towns** in Utah (1950 pop.) - Grantsville (pop. 1,537), some 55 miles away by circuitous back roads; Tooele (pop. 7,269), about 40 miles away.

BIA Field Office - Uintah and Ouray Agency, Fort Duchesne, Utah

LAND: 19,666 acres, principally owned in common by the Tribe. One Indian family operates a little less than 500 acres as a farm. Remaining acreage is leased to non-Indians for grazing purposes. Sparse open country with considerable desert and waste land.

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TRIBE: Goshute branch of Shoshone.

POPULATION: 50 estimated in PHS service area, 1959
41 enrolled tribal members in 1950

THE
PEOPLE

CHARACTERISTICS: Blood quantum - Majority full blood. Homes - Typical dwelling a poor frame shack. Education - With the exception of a few adults, all persons aged 6 and older read and write English; all speak English. Children attend public school. Livelihood - Average family income low. Source - Livestock and farming by one family. Remaining families find seasonal agricultural and ranch work; railroad jobs.

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HEALTH
RESOURCES

INDIAN HEALTH FACILITIES: A few Indians from this unit go to the Public Health Service Hospital at Owyhee, Nevada.

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals, mainly the 36-bed Tooele Valley Hospital, Tooele, Utah, 40 miles from Grantsville and at the White Pine General Hospital, Ely,

SKULL VALLEY RESERVATION, UTAH (continued)

Nevada. Medical and dental services to Indian patients at Ely by local private physician and dentist, through contract with Public Health Service.

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SPECIAL PROBLEMS

HEALTH STATUS: Accidents, influenza and pneumonia the leading causes of death among Indians in Utah, 1956-1958.

OTHER: A small group of Indians; extremely isolated.

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FIELD NOTES AND OBSERVATIONS

Uintah and Ouray Health Service Unit

UINTAH AND OURAY RESERVATION including THE UNCOMPAHGRE RESERVATION, UTAH

LOCATION: Northeast Utah, 150 miles east of Salt Lake City. Shaped like a scythe, the Green River separating two sectors. Uintah and Ouray Reservation forms the blade-like upper portion, extending east to west in Duchesne and Uintah Counties, below Uinta Mountains and the Ashley and Wasatch National Forests. The Uncompahgre (or Hill Creek Extension) forms the handle, north to south in Uintah and Grand Counties. U. S. Highway #40 runs through Uintah and Ouray Reservation. Principal settlements (1950 pop.) - Fort Duchesne, Ouray, Randlett, and Whiterocks. Indian families also live in small non-Indian towns of Duchesne (pop. 800), Myton (pop. 300), and Altona (pop. 300). Dozens of other crossroad settlements with Indians, as for example, Bluebell.

Nearest off-reservation towns in Utah (1950 pop.) South of Uintah and Ouray Reservation: Vernal (pop. 3,500) 25 miles east of Whiterocks; Roosevelt (pop. 2,100) 12 miles south of Whiterocks; Tabiona (pop. 160) at southwestern edge of reservation.

BIA Field Office - Uintah and Ouray Agency, Fort Duchesne, Utah

LAND: 1,060,000 acres, about one-half in Uintah and Ouray Reservation which lies in the Uintah Basin to the west of the Green River and constitutes the watershed of the Duchesne and Strawberry Rivers; one-half in the Uncompahgre Reservation on east side of the Green River encompassing the watershed of Hill Creek, White Creek, and Willow Creek.

White and Indian land and habitations are intermingled on this reservation. Grazing land with some farm and timber land, mostly in tribal ownership. Irrigable agricultural land operated largely by non-Indians. Oil, gas, and phosphate, and coal resources. Gilsonite deposits now being mined.

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TRIBES: Uintah, Whiteriver, and Uncompahgre bands of Northern Utes.

POPULATION: Approximately 1,900 in PHS service area, 1959. By terms of PL 83-671, enacted August 27, 1954, several hundred Indians of mixed blood, will be terminated from Federal supervision, no later than September 1961. No termination proceedings are underway for the full-blood group, numbering approximately 1,400.

THE
PEOPLE

UINTAH AND OURAY RESERVATION including
THE UNCOMPAHGRE RESERVATION, UTAH (continued)

CHARACTERISTICS: Blood quantum - 3 out of 4 fully Indian in 1960.

Homes - Typically a 3-4 room frame house, some smaller houses, and occasionally a log cabin. Residents of about 25% have running water from wells or a public water supply; 50% haul water from chlorinated public supply source; 25% haul water from irrigation ditches, rivers, and other unsatisfactory sources. Most homes have outdoor toilets.

Education - Large majority aged 6 and over read and speak English. Most children attend local public schools.

Livelihood - Average family income low. Limited employment opportunities in reservation area. Source - Subsistence farming; small returns on grazing leases, oil and gas leases and bonuses; coal. Colorado Judgment Fund resulting from a decision in 1950 on a claim against the U. S. Government for land formerly held in Colorado by the Utes has enabled the distribution of per capita payments. These will soon be discontinued, reducing many families to a subsistence level, unless proposed construction projects related to dams and water diversion get underway.

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INDIAN HEALTH FACILITIES: Public Health Service Indian Health Center at Fort Duchesne with full medical, dental and nursing coverage; sanitarian aide also stationed here.

OTHER HEALTH RESOURCES: Hospital care at Federal expense may be authorized at community hospitals, mainly the Roosevelt (Latter Day Saints) Hospital, Roosevelt, 8 miles west of Fort Duchesne. Medical supervision of Indian patients at this hospital by two local private physicians through contract with the Public Health Service. Occasional use made of the 29-bed Uintah County Hospital, Vernal, 25 miles east of Fort Duchesne. Patients also referred to Veterans Administration Hospital at Salt Lake City.

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HEALTH STATUS: Diseases of the respiratory and digestive system the major cause of hospitalization in 1958-1959. Respiratory diseases and their complications the chief notifiable illness observed by field staff.

OTHER: There is no industry in this community and the lack of railroads and other means of transportation hampers economic development. Severe unemployment among Indians and non-Indians; existing farming and ranching inadequate to care for entire population of region.

HEALTH
RESOURCES

SPECIAL
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